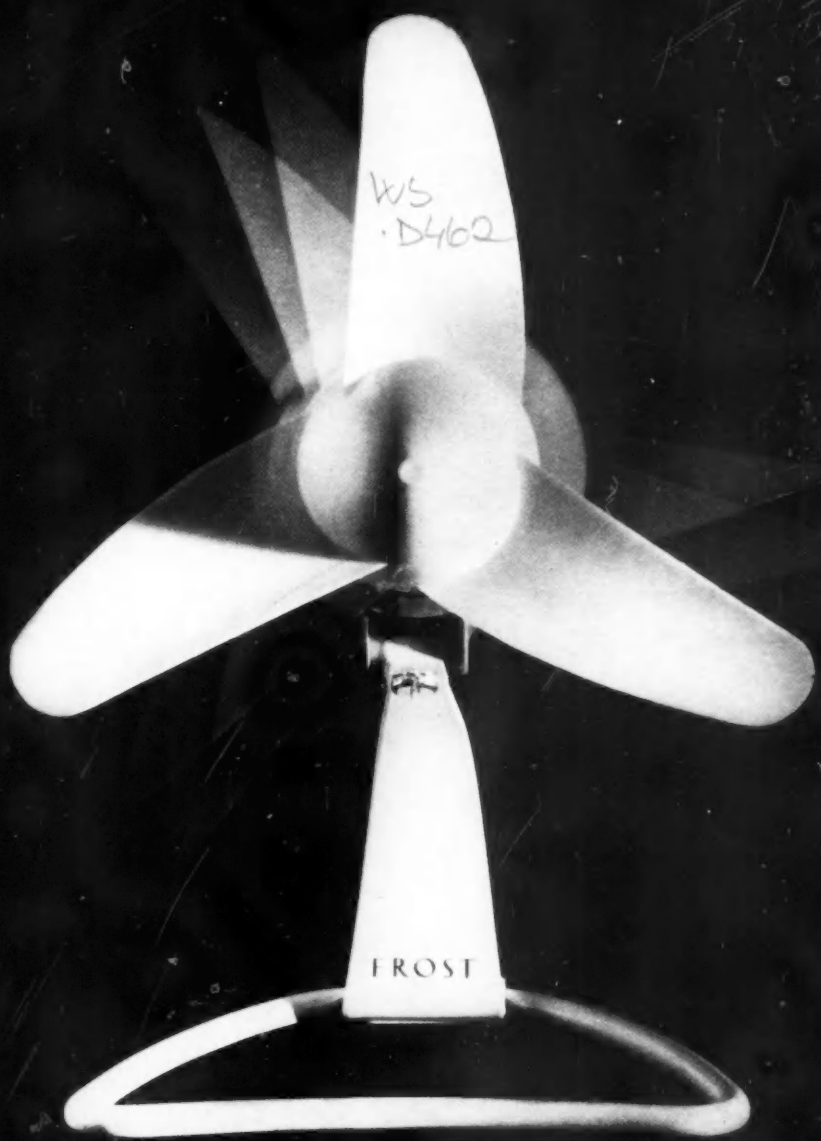
...Council of Industrial Design
...tober 1958 No 118 Price 3s

Design

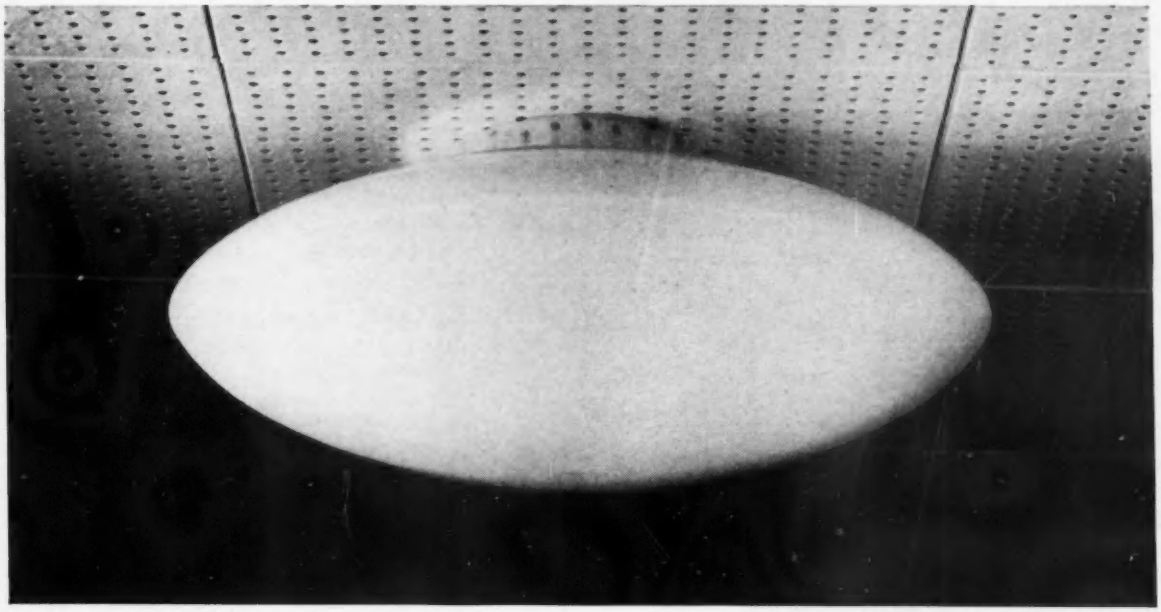


THEY'RE AT LORIVAL

For long-running
mass-production
plastic mouldings
in any material
it certainly pays
to 'leave it to Lorival'

LORIVAL PLASTICS · UNITED EBONITE & LORIVAL LTD · LITTLE LEVER · NR BOLTON · LANCS

L102



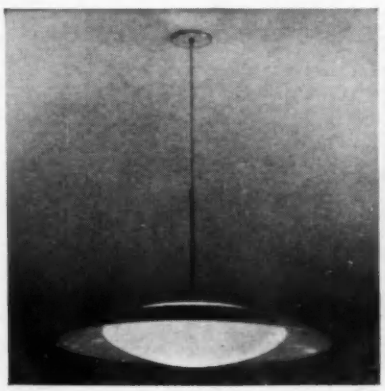
MA 1500 series from 34/8 plus tax

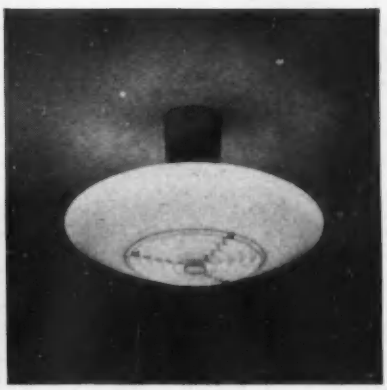
Designed by Paul Boissevain, Dip. Arch., M.S.I.A.

announcing the new ELLIPSE SERIES 10" 12" 14" 18" & 22" 60-300w

The Ellipse series provides architects and engineers with a basic range of 120 elegant lighting fittihgs, of slim appearance, which do a first class lighting job. The quality and finish is of the highest order, and the construction without use of screws or levers is simple, effective and foolproof, allowing for easy fixing and maintenance.

Prices are comparable with standard commercial units. Full details, including dimensioned drawings, are given in publication MA 1500 available on request.





THE MERCHANT ADVENTURERS LIMITED

16-43 PORTLAND ROAD LONDON W.11 TELEPHONE PARK 1221 (5 lines)

L102

IN 118

I

all this talk about cutting costs!

There's nothing new about that. Our customers have been quietly doing it for years—with the help of Bowater Board. First, it's cheap to buy—still the same price as in 1939! Second, there's no end to the things you can do with it—you can drill it, blank it, stove enamel it, veneer it, even bend it to a 1" radius—which means it can often replace much more expensive materials. Third, there's little or no cutting to waste, thanks to a good range of standard sizes (or we'll cut special sizes for a reasonable run). Fourth, delivery is reliable, so there's never any need to waste valuable storage space "just in case . . . "

Below are three examples of Bowater Board cutting costs and doing a better job into the bargain . . .

railway carriage linings . . .

packing cases . . . *portable radios*

Imagine how you could use

Bowater Board

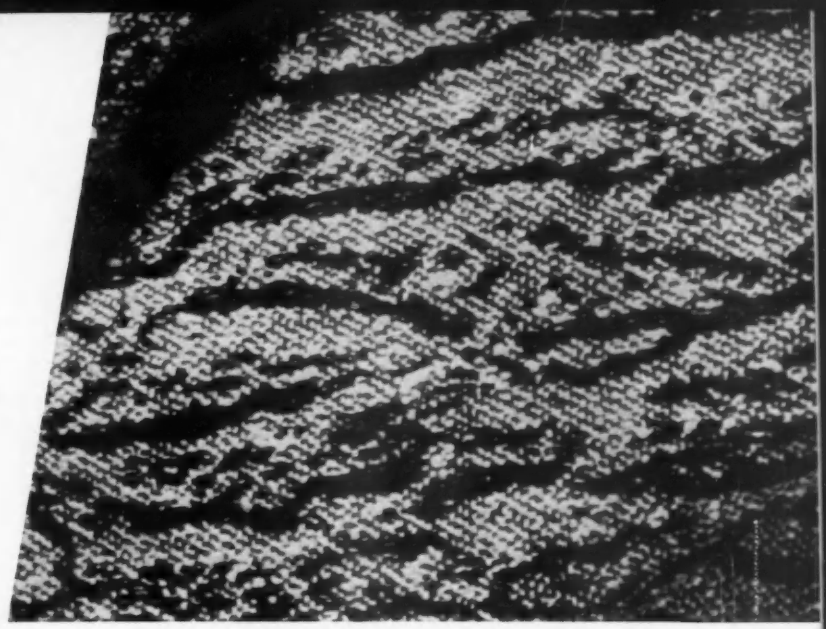
Like a booklet and some samples to start you thinking? Write to:

BUILDING BOARDS DIVISION, BOWATERS SALES COMPANY LIMITED, BOWATER HOUSE, KNIGHTSBRIDGE, LONDON, S.W.1. KNIGHTSBRIDGE 7070

CRC60BI

TIBOR

SHERWOOD Accent on colour! New deep-textured fabric for curtaining and upholstery in striking colour combinations of Golden Yellow, Rich Red, Kingfisher Blue, Soft Lilac, Olive, and Peacock Blue. Available at your leading store at under £1 a yard. Designed by Tibor Reich, F.S.I.A. and manufactured by Tibor Limited, Stratford-on-Avon.



VESPER

MODEL 502 Traditional comfort with a contemporary air! An armchair from the new "Petwood" Suite, covered in a wide variety of fabrics in plain colours, and featuring smart wooden knuckles, which can be polished to any shade. Designed by N. K. Hislop for Gimson & Slater Ltd., Walton Street, Long Eaton.

STOCKWELL

TANGIER (Regd.) A pleasing overall pattern created by Tibor Reich F.S.I.A. for the Equerry (Regd.) range of Wilton Filling. Produced by S. J. Stockwell & Co. (Carpets) Ltd., 16 Grafton Street, W.1. and guaranteed mothproof for life.

FIESTA designed by Ronald E. Brookes, M.S.I.A.

FIESTA is on show at the Brussels Exhibition. Available in four House & Garden colours—Cardinal Red, Forest Green, Light Gunmetal, Middy Blue, in addition to Lime Yellow, Black, White. Made from non chipping, stain resistant, Melmex and guaranteed for twelve months. Ask your stockist or come to our showrooms: — "eighteen", Edmund Street, Birmingham 3 where we have the complete range pleasantly displayed.

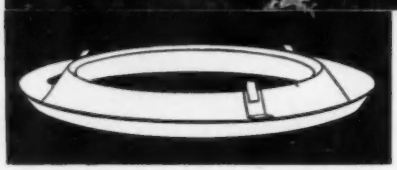
the new 'Californian' kitchen

Already, in the comparatively brief time since its introduction, the Wrighton 'Californian' kitchen has won a host of admirers. Brilliantly designed by Nigel V. Walters, F.S.I.A., the 'Californian' kitchen has so many features of instant appeal . . . clean contemporary lines . . . beautiful contrasting colour schemes, with a choice of ten new paint colours, finished in a high gloss . . . superlatively sound construction, in sturdy seasoned timber, with solid natural beech edging and formica working surfaces . . . unit interiors finished in white enamel, drawers in mahogany. All base units are in the 21″ module. We shall be very happy to send you complete illustrated details of the Wrighton 'Californian' kitchen, together with price specifications. The 'Californian' kitchen, despite its luxury appearance, is in the medium price range.

See and admire **WRIGHTON** furniture

F. WRIGHTON & SONS LTD · BILLET ROAD · WALTHAMSTOW · LONDON · E.17 *TELEPHONE . LARkswood 5521 (10 lines)*

atlas display lighting



W. H. Smith exhibit at the World Fair, Brussels—
illustrating a typical use of Atlas display lighting.

Successful display lighting requires, above all, flexibility within the lighting system. It is this quality which is a predominant feature of Atlas Display Lighting fittings. From four basic units and half a dozen attachments some fifty fittings can be assembled, suitable for surface or recessed mounting, with horizontal or vertical lamps, in ratings from 60 - 300 watts. The attachments include deep and shallow satin etched bowls, a white metal louvre, clear or pearl stepped lens, a glass 'festival' diffuser and a selection of Cinabex colour filters. A unique Soffit ring (illustrated above) clips into position hiding all fixing screws and carrying the attachments. A number of additional fittings designed for special display lighting jobs complete this range of fine quality Atlas fittings. Atlas Lighting engineers are keen to help you with your lighting problems. Their advice is free!
Please ask for one to call.

ATLAS LIGHTING LIMITED. A subsidiary company of Thorn Electrical Industries Limited.
233 SHAFTESBURY AVENUE, LONDON, W.C.2.

Brewmaster sign made for Flowers Brewery by the Acme Showcard and Sign Co. Ltd., with moulded 'Perspex' background, silk screened printed moulded front panel and 'Perspex' surround with bevelled and polished edges.

This outdoor internally illuminated Guinness sign was made from 'Perspex' acrylic sheet by Acme Showcard and Sign Company Limited. There are moulded 'Perspex' letters and moulded Toucan applied to the moulded 'Perspex' panel. The individual house names are engraved and filled black on a separate 'Perspex' panel.

'Perspex'! Cheers!

WHEN the call is for 'one of the best' only a 'Perspex' sign will do. Choose 'Perspex' for eye-catching, colourful, illuminated signs. They remain good-looking throughout a long and useful life and when illuminated they sell just as hard by night as by day. 'Perspex' acrylic sheet is easily handled and is a material with which the imaginative designer enjoys working. It is available in a range of gay, transparent, translucent, and opaque colours as well as in clear and opal sheet.

'PERSPEX'

'Perspex' is the registered trade mark for the acrylic sheet manufactured by I.C.I.

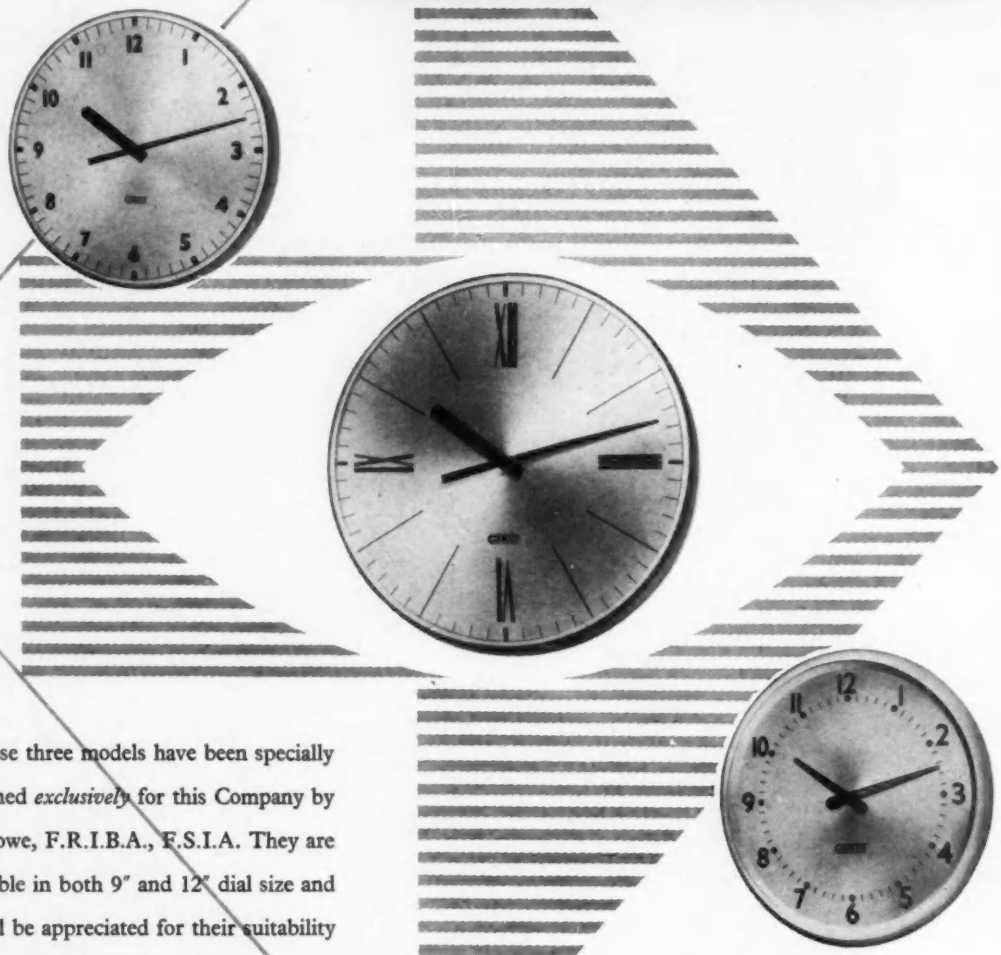
ICI

IMPERIAL CHEMICAL INDUSTRIES LIMITED · LONDON · S.W.1

P 650

Selected by The Council of Industrial Design

for display in **THE DESIGN CENTRE**



These three models have been specially designed *exclusively* for this Company by Jack Howe, F.R.I.B.A., F.S.I.A. They are available in both 9" and 12" dial size and will be appreciated for their suitability where clocks of modern design are required. All models are available for Synchronous or Master Clock operation.

GENTS' OF LEICESTER ELECTRIC CLOCKS

For further details write for our illustrated leaflet "Time for Business".

GENT & COMPANY LIMITED · FARADAY WORKS · LEICESTER

London Office & Showrooms: 47 Victoria St., London S.W.1.

Also at: BELFAST · BIRMINGHAM · BRISTOL · EDINBURGH · GLASGOW · NEWCASTLE

Other Products include: TIME RECORDERS · WATCHMAN'S CLOCKS · PROGRAMME INSTRUMENTS · LUMINOUS CALL SYSTEMS
TOWER CLOCKS · FIRE ALARM SYSTEMS · STAFF LOCATION SYSTEMS · BELL AND INDICATOR SYSTEMS · ETC.

FORMICA*

CURVED SURFACES!

Formica Ltd. have perfected a development that you will welcome. This is the new post-forming process, by which FORMICA decorative laminates can be shaped into curves to your design requirements.

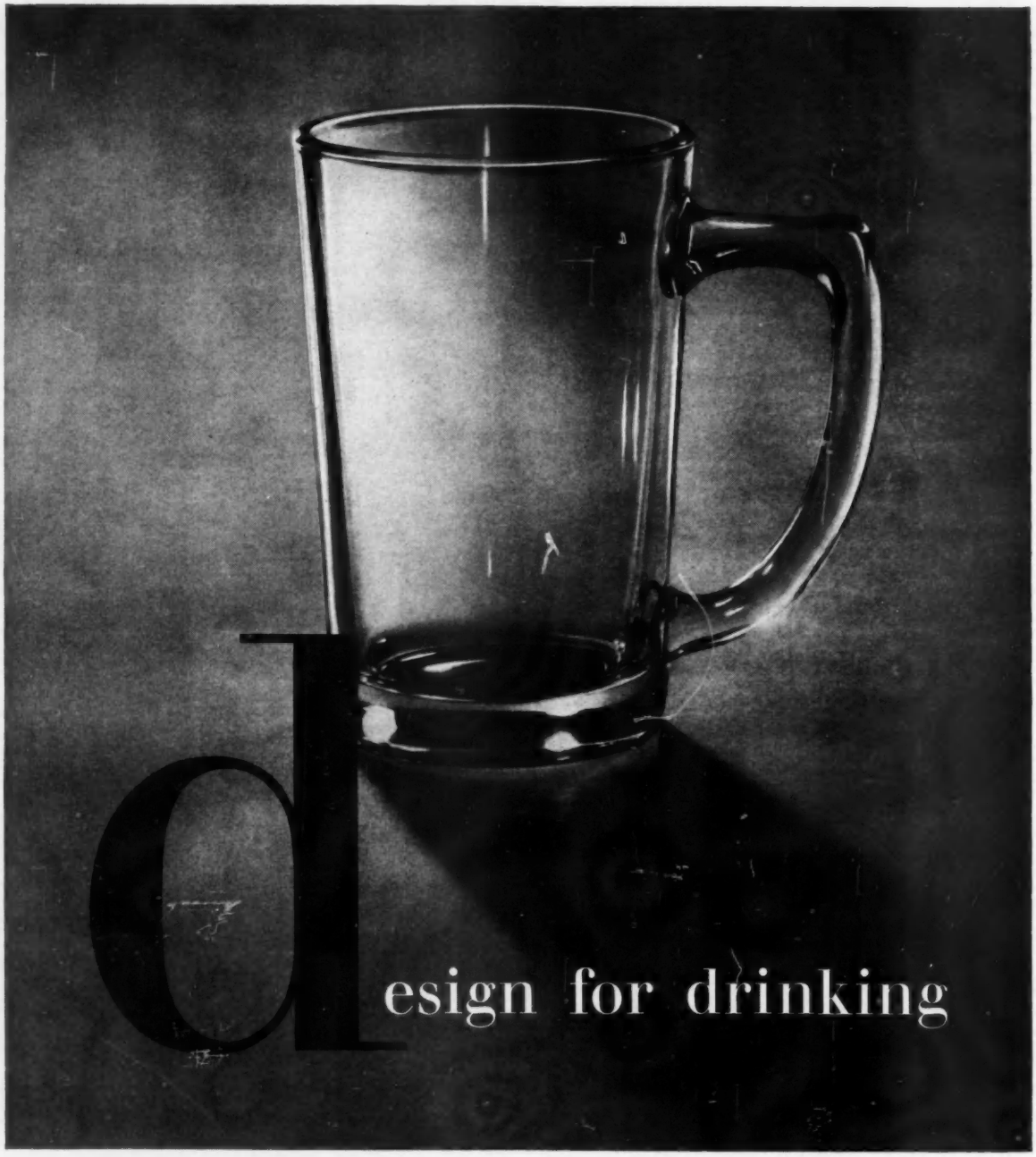
Look at the picture above. You will get a quick idea of some of the possibilities if you refer to our picture. (We have chosen a kitchen as an illustration, but the principle has, obviously, a much wider range.) You can now legislate for simple or multiple curves, both convex and concave, in the great majority of FORMICA patterns and colours; and you can apply this to large surfaces and small, to the lining of a cocktail cabinet or the panelling of a lift . . . to the rounding of a pillar or a counter-edge.

May we send you fuller particulars? Most contractors are now conversant with the simple techniques involved. We shall be pleased to send you fuller data —and our Technical Service Department is at *your* technical service, for consultation on any problem or any unusual application.

FORMICA– the finest of all the decorative laminates

*FORMICA *is a registered trademark. Formica Ltd, Architects' Postforming Enquiries, De La Rue House, Regent Street, London W1*

THE RESULT OF TEAMWORK



A beer mug, designed by
A. H. Williamson ARCA for the Sole Distributors, Johnsen & Jorgensen Flint Glass Limited, in conjunction with Britain's largest producers of table glass, The United Glass Bottle Manufacturers Ltd.

SHERDLEY REGD

TABLE GLASS

MADE IN ENGLAND

MODERN STEEL DESKS at Low Cost

Features include:—

Clean, modern design.

Lino-covered top with extruded aluminium retaining bead.

Alternative arrangements of drawers (3 Box drawers or 1 Box drawer and 1 Filing drawer in either pedestal of Double Pedestal Desk; 3 Box drawers or 1 Box drawer and 1 Filing drawer in Single Pedestal Desk, with pedestal on right or left).

Box drawers run on nylon glides and fitted with rubber stops.

Filing drawers on fully progressive ball-bearing suspension arms.

Recessed plinths below pedestals to provide toe-space.

Suspended Filing Chassis in Filing drawers if desired (either cross-filing foolscap-width or full depth quarto-width).

Stationery Inserts for Box drawers if required.

High-grade finish, stove enamelled over phosphate coating.

Standard Colour, Scarborough Grey with Black lino top. Other colours to order.

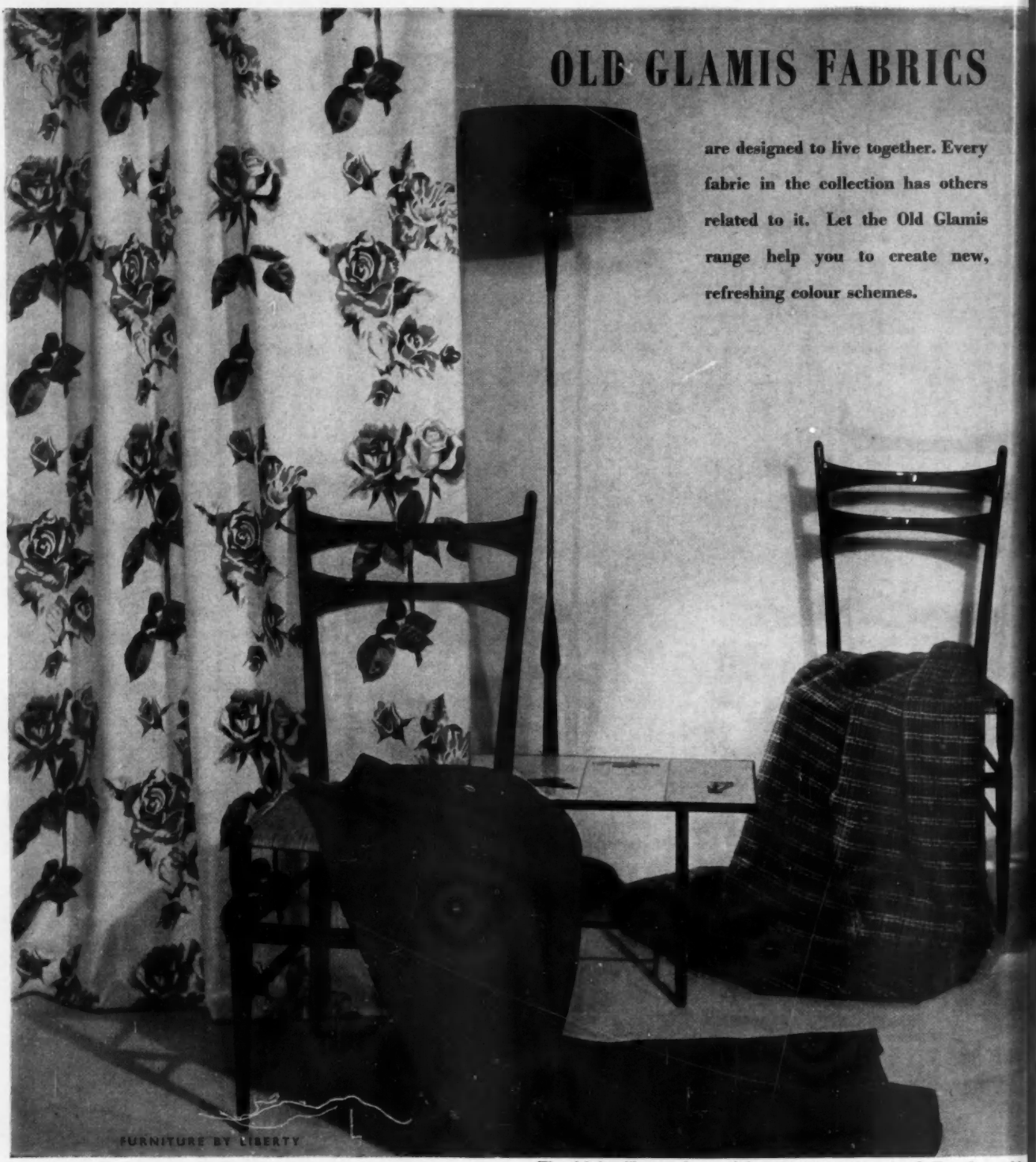
EXPORT: The construction of these desks enables them to be completely knocked-down for shipment.

'THANET'
DOUBLE PEDESTAL AND SINGLE PEDESTAL DESKS

Full details are in our List No. DN951. Please send for a copy.

Harvey

G. A. HARVEY & CO. (LONDON) LTD. WOOLWICH ROAD, LONDON, S.E.7 GREenwich 3232 (22 lines)



OLD GLAMIS FABRICS

are designed to live together. Every fabric in the collection has others related to it. Let the Old Glamis range help you to create new, refreshing colour schemes.

The fabrics illustrated are: left, KENSINGTON *printed Everglaze chint colour 1;* centre, GRUINARD *cloth colour 11;* right, STROMNESS *cloth colour*

OLD GLAMIS FABRICS

Architects, interior designers and buyers are welcome visitors to our London or Dundee showrooms. Here we can show you Old Glamis furnishing fabrics which cannot be seen elsewhere including a range prepared exclusively for contract work. Write for a copy of the *Old Glamis Home Maker's Colour Guide*, a new and ingenious device for planning colour schemes.

By Appointment Makers of Old Glamis Furnishing and Embroidery Fabric to H.M. Queen Elizabeth the Queen Mothe Donald Bros. Ltd.

DONALD BROTHERS LTD., THE OLD GLAMIS FACTORY, DUNDEE and ROXBURGHE HOUSE, 257, REGENT STREET, LONDON, W.

Architects for Terminal Building:
Yorke, Rosenberg & Mardall F/FRIBA's
Consultant Engineers:
Frederick S. Snow & Partners

Furniture for Gatwick Airport supplied by Hille of London, designers Robin Day and Charles Eames

hille contract division

Hille of London Ltd 39-40 Albemarle St London W1 Hyde Park 9576 and Hille of London (Midlands) Ltd 24 Albert St Birmingham 4 Midland 7378/9

for her – in her wisdom

Not for her the constant fear of damage—the accidental stain, the children's finger marks . . . not for her the worry of colours that will fade. Adamant in her choice, she insists on chairs upholstered in leathercloth made with Geon PVC.
Materials made with Geon resist scruffing and scratching . . . do not stain . . . are easily cleaned with a damp cloth. They are modern materials . . . available in a virtually limitless range of non-fading colours and textures.

covering made with Geon PVC

Throughout the home, in chair covering and shelf covering, in curtains, table cloths and countless other applications, Geon PVC harmonizes with all that's best in contemporary design.
Remember: Geon PVC. For full information write for booklet No. 9.

Firmback chair, Model F70, by 'Cintique' in Lionide Leathercloth made by James Williamson & Son Ltd using Geon PVC.

British Geon Limited

Geon is a reg'd trade mark

Geon

SALES AND TECHNICAL SERVICE DEVONSHIRE HOUSE PICCADILLY LONDON W1 HYDE PARK 7321

This world of print : 3

... another shaft of light on the printing industry

from Balding and Mansell

Salesman enters

inspires confidence

departs

a jarring note

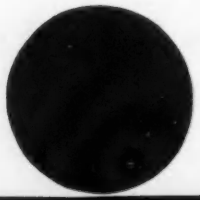
mental reassessment

exudes confide

pours oil

braces upper lip

desponds



... calculates odds

Ring a few changes in **polyzote** Regd.

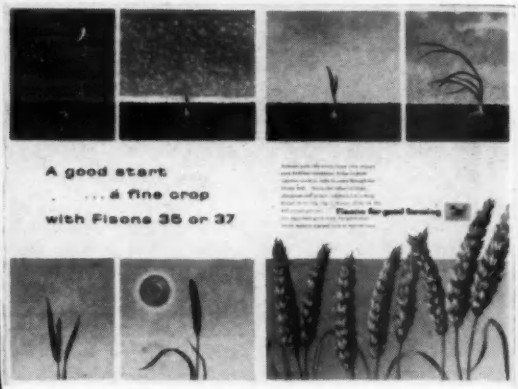
EXPANDED POLYSTYRENE

Polyzote, the registered trade mark of a relatively new material, expanded polystyrene, offers boundless possibilities for moulded display forms. It's feather-light, yet rigid. It's clean, good-looking, almost white, and has no smell. You can easily cut it, make holes or stick pins in it. You can paint it, or we can self-colour it during production. Polyzote mouldings can be produced at a cost which is extremely competitive with other mouldable display materials. Expanded Plastics Ltd. provide a complete service and welcome your enquiries.

EXPANDED PLASTICS LIMITED

Subsidiary of Expanded Rubber Company Limited. Member company of the British Xylonite Group

675 Mitcham Road, Croydon, Surrey. Telephone: Thornton Heath 3622



1

2

There are prizes to be won at Mathers

For the second year running Mather and Crowther have taken more first prizes than any other advertising agency in the Layton Awards. Their four winners (four out of twelve!) for 1957 are reproduced here. They are evidence, in black and white and colour, that Mathers pitch their creative standards high.

What the evidence does not show is that the people who made these advertisements are remarkably young. Mathers believe that talent will out at any age. So if you are young and have a real gift for drawing and an aptitude for advertising agency life, Mathers can use you. More than use you, Mathers can train you and *form* you by giving you the experience of working for some of the greatest national advertisers.

Write to Stanhope Shelton (Creative Director), Mather & Crowther Ltd., Brettenham House, Lancaster Place, London, W.C.2.

3

4

1 *Black and White, Group A, First Prize*
2 *Colour, Group C, First Prize*
3 *Black and White, Group D, First Prize*
4 *Black and White, Group C, First Prize*

Number 118

October 1958

Design

CONTENTS

The addresses of manufacturers in this issue are on page 71

Manufacturers are invited to consult the Council of Industrial Design's
RECORD OF DESIGNERS
a free service of recommendation and introduction of designers to industry

Editorial Circulation Advertisements The Council of Industrial Design, The Design Centre, 28 Haymarket, London SW1 Tel: TRAfalgar 8000 AND The Council of Industrial Design Scottish Committee, Scottish Design Centre, 46 West George Street, Glasgow C2 Tel: Glasgow DOUglas 3914

Design may be obtained from booksellers at home and abroad. Yearly subscription rate: UK 40s post free

PROFILE OF A CREATIVE MIND

No. 16 *Locksmith*

Although Joseph Bramah invented his celebrated lock 174 years ago, the same type of locks—bearing his name—is being made today. This farmer's son, who lived from 1749 to 1814, was responsible for many other inventions, the most important being a hydraulic press.

Until Bramah's day, locks were seldom reliable, for they were often nothing more than bolts held in place by springs and protected against interference only by obstacles which the key had to pass before it could turn. Bramah's lock was a great advance because its security was based on a number of spring-loaded sliders which, until released by a key, fitted into notches and so secured the bolt. Bramah's confidence in his lock was such that 200 guineas was offered to anyone who could pick it. For 67 years it withstood every attempt, but during the Great Exhibition of 1851 an American named Hobbs succeeded in 19 hours. It is no disparagement to say that Bramah was ingenious rather than original: the principle of his lock coincided with that of a very old Chinese wooden lock. He was eminently practical, however, whether developing scientific discoveries or seizing upon an incomplete invention and perfecting it.

In I.C.I., creative minds are constantly searching for new products and processes and for improvements to existing ones.

ICI

Find the link

OUR LOCAL MEN'S OUTFITTER is wringing his hands. He has been caught unawares by the change of fashion in the packaging of men's shirts. When he moved in a few years ago, he spent a great deal of trouble and as much money as he could afford in fitting out his shop with tiers of glass-fronted cubby-holes each to take half a dozen shirts. Then the shirt makers decided, overnight as it seemed to him, to pack each non-iron shirt in a large individual box. Result – chaos in his shop; cubby-holes empty and piles of boxes stacked up to the ceiling all around on top of his neat but useless fitments.

The moral of that little tale is that one thing leads to another, or that design is indivisible. A change in one direction leads to a change in another, and therein perhaps lies the best justification for a magazine like DESIGN.

Take this issue for instance – as mixed a bag as any magpie could covet: a piece on the European market; a report on new materials and techniques; a glimpse of a new mace for a university and another of the interior of the BOAC *Comet*; a glance at some new wallpapers and another at some plastics laminates; a discussion of house styles in East Africa and an analysis of a concrete lamp-post at home; a review of current British consumer goods and another of foreign appliances. What more could one ask?

And yet many readers with noses glued to their own lasts are bound impatiently to flip through the pages and, finding nothing to their immediate interest, will push the issue aside making perhaps a mental note not to renew their subscription. We must accept this hazard in publishing a magazine purporting to cover the whole field of design in industry. Each issue is sure to disappoint someone if that someone is looking only for what touches his bread and butter.

But no man and certainly no businessman can live in a watertight compartment. As our outfitter would now agree, he must keep his eyes skinned, for advances in one industry will have repercussions in another. A case history from East Africa may well remind someone of something in East London. A new mace in Leicester may lead to a new mayoral jewel somewhere else and that in turn to a new chain of office in some up and coming trade association. The new interiors for BOAC *Comets* may arouse other transport authorities or other departments of the same authority. New wallpaper designs may spur the tile manufacturers, new tiles the slabbers, and so on from industry to industry. And all these steps forward may in time add up to our better prospects in the European market.

Thus design is the link and your link may well be DESIGN, even if it never mentions your own particular subject.

P.R.

Pointers

No more fins and gingerbread?

"Are *you* budgeting for psychological momentum?" The question is being asked by a group of magazines in America. No doubt some manufacturers are able to read it without a qualm. But it must be very worrying for the motor companies. They know all about psychological momentum, but they haven't the faintest idea which way it is pointing at the moment. If they looked at their consumer magazines and their industrial design publications they could easily be convinced that the public has turned nasty and is all for the removal of flaring tail fins and chrome 'gingerbread'. There is certainly a strong feeling in the specialised Press that Detroit must think again, but is the public quite as worried as the critics want it to be? Henry Dreyfuss, who has given the whole industry a magnificent belting in *Consumer Reports*, says that Americans are "taking a fresh look" at cars and that "the shine is rubbing off the chrome". The magazine, *Advertising Age*, has also published a stinging attack with emphasis on "the public's rights". And the odd senator is always saying something about cars being too big, too powerful, too flashy, and too expensive for the "average American".

But what does the average American really think? Nobody really knows. At the New York *International Motor Show* in April there was a boom in imported cars. But most of these, though smaller than American models, were trying desperately to look American. Our own Sunbeam *Rapier* compromised by looking British in front (upright grille) and American in the rear (colour strip and tail fin). And the Renault *Dauphine* played for safety by offering such optional extras as a chrome bound colour strip and an elaborate chrome grille. All the evidence suggests that Americans are tired of large cars – but not of flashy cars, as some design critics would like to think. But Ford is not going to be panicked into abandoning the search for a bigger, best-selling monster. Even after its flop this year with the *Edsel* – a dream car built after a research programme into such useless user-requirements as status symbols and ego extensions – it is not to be put off. With hilarious seriousness it has asked the Institute of Motivation Research to find out *why* Americans buy foreign economy cars. One man who knows the reason is Michael Braude, the president of a large taxi company. He estimates that 12 per cent of the cars on the road are taxis, and because the cost of maintenance is so important he believes that Detroit will eventually give more thought to trouble free cars and less to styling.

That man is an optimist. Doesn't he realise that the last thing the public itself cares about is efficiency? Not quite the last thing, perhaps. According to the Nuffield Organisation, which was asked to comment on an article in the July edition of DESIGN, the public doesn't even care about the safety of a car. "It is not strongly 'safety-minded' in its choice of a car, which is probably a good thing. People regard the car as a means of pleasure or transport, and if they regarded it as a lethal weapon they would probably, in the end, decide not to buy a car at all."

Dearer pull-up for car-men

Nuffield seems to be a little behind the times here. Hasn't it heard that one of the new successful sales gimmicks in America is to offer more efficient brakes as an optional extra? This is, of course, a new low in salesmanship. *All* cars should have the maximum number of built-in safety devices, even at the risk of cutting down on expensive styling. And I do not mean things like safety harnesses. I mean devices that lead not to softer accidents but to safer driving.

Henry Dreyfuss blames styling for inefficiency and accidents. He challenges the official figures which show that 80 per cent of car accidents are the result of human, not mechanical failure. How many human failures, he asks, are the result of uncomfortable seats, poorly organised controls, improper visibility? The article in DESIGN asked the same questions and the answers by manufacturers are revealing. "It must be recognised", we are told by the chief stylist of Rootes Group, "that each manufacturer is waging a continuous struggle against rising costs, and in many cases the means of increasing passenger convenience is associated with higher costs so that if implemented places him in a less competitive position on this score."

Death in a juke box

The chief stylist disagrees with DESIGN'S suggestion that controls should be different in shape so that they can be distinguished by touch. "Apart from detracting from the appearance", he says, "this policy departs from the rationalisation programme which helps to keep a rein on costs." Nuffield also says "We find it hard to believe . . . that a customer would welcome a row of knobs all different in shape."

And here are a few more extracts from letters to the Editor. ". . . a comfortable position for the foot on the accelerator pedal is not always compatible with having it higher than the brake for engineering or economic reasons". ". . . unless the length of the car is increased . . . to give the same relative seating space it inevitably means that the foot brake stands a good deal higher than the accelerator pedal. Unfortunately, extra length means extra cost . . .".

And so on. Incidentally, 5,550 people were killed on the roads last year and nearly twelve times that number were seriously injured. Human failure? Possibly. But how many people met death in a juke box because they couldn't afford "an ideal arrangement of controls"?

KENNETH J. ROBINSON

See page 67 for further extracts from manufacturers, letters on this subject.

European market

This month there will be a further meeting of the OEEC ministerial committee concerned with the European Free Trade Area negotiations. At this meeting it is hoped that agreement in principle on all main problems will be reached. On January 1, 1959, the six Common Market countries are bound by treaty to reduce their internal tariffs by 10 per cent. What steps are British manufacturers now taking to sell to this new Europe and what is Britain's standing in these markets? To find out DESIGN *interviewed a cross-section of manufacturers in the consumer goods fields, and wrote to a number of retailers in the CM and FTA countries asking them for their personal impressions of British goods. The enquiry shows that there is an urgent need for British firms to get themselves known in Europe.*

INCREASING BRITISH EXPORTS

UNTIL THE COMMON MARKET and Free Trade Area proposals were instigated, British manufacturers in the consumer goods fields (with a few important exceptions) had not seriously attempted to compete in European markets. Those firms which did not sell all their production on the home market concentrated primarily on the Commonwealth for their exports, so that 'Made in Britain' now no longer carries its former weight on the Continent. Faced with the new Europe, many British manufacturers will have to sell a new idea of themselves and their products.

The opinions of Continental retailers confirm this. The representative of an important retail store in Amsterdam summed up their attitude when he wrote to DESIGN: "Generally speaking only small quantities of merchandise are imported from England by our enterprise in comparison with imports from other European countries and the USA. This is chiefly due to the following factors:

(a) The traditional character of a great de-' of British goods.

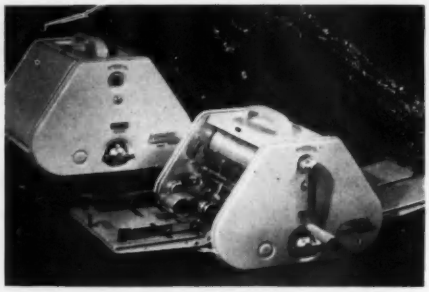
(b) Rather high, sometimes very high . comparison to similar articles from other cou .

(c) Sizes, execution and appearance of En. h modern goods do not always meet Continental taste.

"This does not imply that there would be any resistance in Holland to British made products; quite on the contrary, the label 'made in Britain' means quality, durability and craftsmanship to a Dutchman, and is a strong selling point.

"There is definitely little knowledge in our country of English achievements in modern fields; English business enterprises have given little or no publicity to modern products in our markets; neither have English firms made efforts to get acquainted with the specific preferences of Dutch clients."

From Belgium came the same story. A British correspondent who is retained as merchandise adviser and fashion consultant to a leading group of department stores in Belgium, with a wide knowledge and experience of selling to the Belgian market, wrote: "Belgium, as you know, has no currency restrictions and has very firm currency, buying without hinderance or permit. This freedom to buy in world markets has, naturally, caused the Belgians to become extremely knowledgeable, hard-headed and discriminating buyers: moreover, due to the existence of only three major retailing organisations, competition there has become a



These portable duplicating machines are made by a relatively young firm now selling designs all over the world. In Europe, Switzerland and Germany are its best markets – although it meets keen competition from local industry there. MAKER *Fordigraph Ltd.* £59.

The *Bantam Colorsnap*, a camera specially designed to simplify colour photography. A representative of the firm writes "There is a general impression that German camera production is so much more efficient than British, and that the latter would be killed by Free Trade. In our opinion this is quite untrue. German superiority is confined to expensive precision cameras, while Britain is most successful in the mass production of well designed, efficient and inexpensive cameras." MAKER *Kodak Ltd.* £10 15*s* 1*d*.

Approximate retail prices in this country, including purchase tax where applicable, are quoted.

Furniture manufacturers are now producing largely for the home market; several manufacturers, however, are experimenting with 'knock down' designs to reduce transport costs. The *Heron* chair ABOVE is already selling successfully on European markets; its legs can easily be removed, and the hulls nest together to save packing space. DESIGNER *Ernest Race*. MAKER *Ernest Race Ltd. From* £27 17*s* 11*d*. The convertible bed settee BELOW is also designed to knock down for transport. DESIGNER *George Fejér*. MAKER *Guy Rogers Ltd.* £36 9*s* 6*d*.

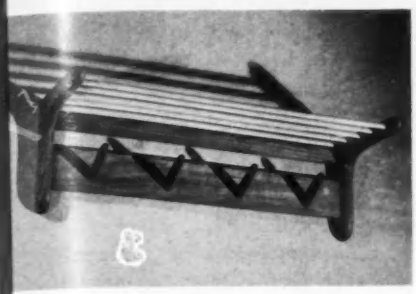
24-hour obsession, and buyers spend as much as eight months of the year travelling abroad. Thus, it is common knowledge today, among manufacturers, that 'what is acceptable in Belgium is good enough for anywhere.'

"When I first commenced this work, I felt that I then had a unique opportunity to promote and aid British exports. I am, however, sad, disappointed and frustrated to tell you, without the faintest fear of controversy or contradiction that, over and over again I have taken (and still do) samples from Britain: in the early stages, I bombarded the various buyers with suggestions and ideas from here, brochures and catalogues, press releases and information of all kinds relating to British merchandise, but have to report that, almost invariably, the ultimate result is a negative one. The story is usually the same – the reasons seldom varying – either, too expensive, or too old-fashioned – or bad colours – or too long deliveries."

What steps are British manufacturers now taking to change this rather grim picture? To find out DESIGN interviewed and corresponded with a cross-section of manufacturers in the consumer goods fields. These f into roughly three categories: those firms who had n attempted to sell to European markets or whose sa there were negligable; those who had built up a mar in one or two countries and who were aiming to incre their sales in the Free Trade Area as a whole; and fir selling on a world wide basis, with factories or sa organisations already established in Europe.

Most of the manufacturers interviewed reported th they were aiming to increase their European trade, m many maintained that they would be doing so with the added incentive of the FTA and CM propos Several welcomed the FTA because they felt existi tariffs and import restrictions their only barrier to t ing to Europe at the present time.

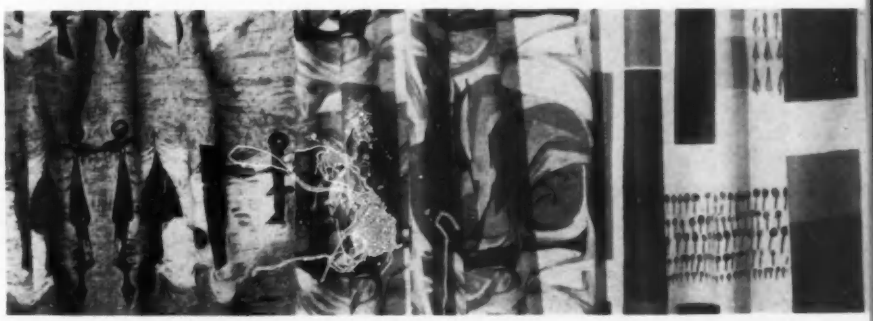
A manufacturer of *hardware* wrote: "A ma difficulty facing us in these markets is import licens restrictions, which recently had a very serious effect our trade with Norway and France." A firm produci *plastics sheeting* wrote: "Our sales to the FTA are the moment comparatively small and are confined



This hat and coat rack is sold in European markets; a representative felt that the firm's sales would increase with the relaxing of the present high import duties. DESIGNER *J. J. Herbert*. MAKER *A. Younger Ltd.* £3 9*s*.

This coffee percolator was one of the designs chosen by the Society of Industrial Artists to represent British design at the International Industrial Exhibition at the 1958 *Foire de Paris*. MAKER *GEC Ltd.* £7 18*s* 6*d*.

The manufacturer of this lighting fitting writes: "Lighting fittings in this range are already being exported in quantity to Norway, Sweden, Denmark, Switzerland, Holland, etc, in spite of the average 25 per cent duty now being levied. We anticipate an extension of this market once the duty is removed." DESIGNER *Paul Boissevain*. MAKER *The Merchant Adventurers Ltd.* £4 18*s* 10*d*.



When a representative of Heal's visited Germany recently to sell the firm's new range, he found that Britain had little or no reputation for modern design among retailers and wholesalers there. The range created a very favourable impression, and is now selling successfully in Germany. DESIGNERS (from left to right) *Gordon Dent, Barbara Brown, Lucienne Day*. MAKER *Heal Fabrics Ltd. Voyagers* (left) cotton £1 3*s* 3*d*, satin £1 7*s* 9*d per yd*; *Sweet Corn* (centre) cotton 11*s* 9*d per yd*; *Plantation* (right) cotton £1 1*s* 9*d*, satin £1 4*s* 9*d per yd*.

ds. These f
who had n
r whose sa
t up a mar
ng to incre
ole; and fir
tories or sa
pe.
reported th
ean trade, a
ng so with
CM propos
ey felt existi
barrier to s

e: "A ma
nport licens
erious effect
firm produc
he FTA are
re confined

ur special designs. This is in spite of the fact that our export sales are a substantial proportion of our total sales. There is a demand for good designs which we will be able to meet more easily with a reduction of tariff barriers. The writer has visited Europe to investigate certain territories where sales are likely to increase with the advent of the FTA." Others felt that the introduction of the FTA would enable them to improve their design standards. A representative of a firm making *plastics tableware* said that with this wider market he would be able to improve design standards, since there was a greater demand for good modern design on the Continent than in this country.

Designing for the Continent

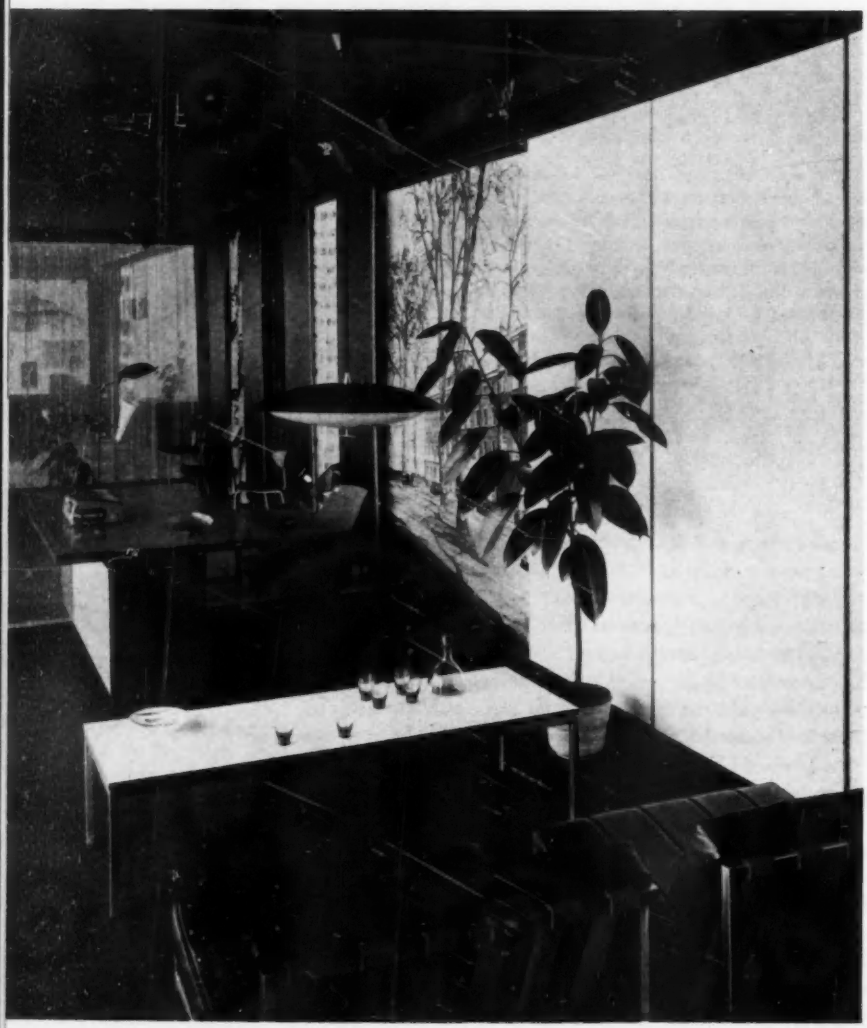
Not all firms, however, were so complimentary to Continental taste. A *cutler* wrote: "From our experience the standard of taste has not improved in these markets during the past 20 years, and we can only sell in Holland traditional patterns which are almost defunct anywhere else. The same remarks apply to France, where we sell table knives with straight blades and square handles, which were no doubt quite the vogue at the turn of the century. These sell better than any other table cutlery we can offer."

A *carpet* manufacturer wrote: "The types of design most favoured by the countries I have mentioned fall mainly into abstract and traditional. In Scandinavia there is almost invariably a call for subdued colours (mostly plain). In Denmark there is the same demand for subdued colours with the emphasis on neutral shades and unadventurous abstract designs. In Germany the call seems to be predominantly for Oriental reproductions except for some contemporary designs produced in cord carpet. In Switzerland we have sold some floral designs of a traditional kind. In general one may say that the European market is very choosy and unadventurous in its floor coverings, and we have the greatest difficulty in satisfying its requirements in design and colour."

The majority of firms producing tableware, cutlery, and furnishing fabrics maintained that Europe wanted

Increasing British exports

Part of the display of 12 of the 20 CoID *Designs of the Year* which was held in the Sundt store in Bergen last month.



Part of an exhibition of modern British design, arranged by Robin Day, and held at the Göppinger Galerie in Frankfurt recently (DESIGN September page 59).

traditional designs from Britain. A firm producing *tableware* wrote: "Designs which are traditional t English china manufacturers sell best; we find tha anything that is even faintly contemporary is no good for the Continental market"; a manufacturer of *printed fabrics* wrote: "The traditional English floral print is by far the most popular type of design demanded by European countries."

Quality, craftsmanship and traditional design – these are the associations British goods now have on the Continent, and these are the qualities on which several manufacturers rely to sell their goods. But the letters DESIGN has received from a cross-section of buyers and retailers in leading stores on the Continent all confirm the fact that it is modern rather than traditional designs that sell best in these markets.

British traditional, or British modern?

A representative of a retail store in Finland wrote: "The sale of traditional British design is very limited. 99 times out of 100 a design must be modern in order to sell well in Finland, at least as far as articles for the home are concerned." A Norwegian retailer wrote: "Our company has imported textile goods from Great Britain for more than a 100 years, and up to the second World War, Great Britain was our main supplier. In the post-war period we have turned to new channels and British goods have to a large extent been displaced by merchandise from Western Germany, the Netherlands and the other Scandinavian countries. It is a fact that the taste of the Norwegian customers has changed considerably, and today people are mainly interested in modern designs which are chiefly produced in these countries. This trend is in my opinion to be regretted as we have had a very close and excellent business connection with a wide range of British manufacturers and the goods delivered have always been of a very high quality. I am fully aware that Norway and Scandinavia are a rather small market for Great Britain, but I do hope that also British manufacturers who are interested in textile exports will try to produce modern designs which suit the Scandinavian market."

The fact that British manufacturers do produce modern designs often comes as a surprise to Continental importers. A representative of a leading *fabric* manufacturer recently visited Germany with the firm's new range. A German wholesaler's initial reaction was "Modern British – no such thing". Nevertheless when he saw the range he was impressed, and it is now selling successfully in Germany.

The exhibition of modern British design arranged by Robin Day, and shown in the Göppinger Galerie Frankfurt-am-Main, aroused a great deal of interest in Germany. Robin Day selected a cross-section of what in his opinion, was the best of modern British design. The majority of the exhibits had not been seen in Germany before. Dr Heinrich König, DESIGN's German correspondent reports on the interest the exhibition aroused and writes "why do we not see any well designed British consumer goods in German stores?"

Manufacturers who have been most successful in

promoting new sales in Europe were those who had made personal investigations of the market. Only one of the firms interviewed was making designs specifically to sell to Europe. A representative of a firm making *plastics sheeting* reported that special designs are produced for each country in which the ranges are sold; many of these are commissioned from designers in these countries. The firm reports that the designs it sells to Europe are generally of a higher standard than those accepted for the home market.

Very few firms, however, make designs to sell specifically to Europe; the majority now selling in these markets produce designs of a high standard, and find a growing demand for their goods on the Continent.

A leading *furniture* manufacturer writes: "Our major sales to Europe are in advanced types of chairs. Through constant visits to the Continent, we have a pretty good idea of what is required, and we are making special efforts to increase our trade in those countries in which we think we have the greatest chance of success. These obviously are the countries nearest to our shores, where transport costs are at a minimum. We are not producing designs to sell specifically to European markets, because our furniture is in the international style."

A firm making *photographic accessories* writes: "We have built up a fairly substantial export trade in Europe, largely because we lay considerable emphasis on design and never bring out an article without having it styled by a first class firm of industrial designers." A *hardware* manufacturer writes: "We have exported articles which are sold in England to Italy, Norway, Sweden and Belgium, principally because of good design and performance."

Small firms with a limited production needs must sell on quality and good design; however, representatives of large firms selling on an international basis all maintained that quality and a high standard of design were as essential as good salesmanship if they were to meet foreign competition on its own ground.

Nor need a manufacturer be intimidated by well established competitors – Britain can sell watches to Switzerland and cameras to Germany. A representative of a firm making *clocks* and *watches* writes: "We have over here as good as, or even better, technological and scientific resources as European counterparts. We have a tremendous wealth of experience behind us, and even though the Swiss and Germans have had greater experience than we, we have made tremendous strides in a very short space of time through united effort, drive and enthusiasm. Large Continental manufacturers do have the advantage of many ancillary firms specialising in particular components, but this is a problem which has largely been overcome in this country by the vertical growth of the main productive unit."

A *camera* manufacturer writes: "Britain is most successful in the mass production of reliable, efficient and inexpensive cameras. They are made by the millions and exported throughout the world – we have even exported to the USA! Our production costs are such that we do not fear competition, and we welcome the expanded market that the FTA would provide."

Some of those firms that are now unable, through licensing restrictions and import duties, to sell to Europe reported that they are already taking steps to make their goods known in the Free Trade Area countries, prior to a more intensive selling campaign when restrictions are lifted. Several made a point of exhibiting on British stands in Continental trade fairs; a representative of a firm making *plastics tableware* was confident that there would be a ready market for his products with the introduction of the FTA; because of import duties he can sell very little to Europe at present, but each time he exhibits his designs he receives a steady stream of enquiries.

Getting to know the market

During the next 10 years the most far-seeing British manufacturers will be seriously studying the European market and aiming to sell a new idea of themselves to Europe. A manufacturer of *kitchen equipment* such as cookers, spin dryers, etc, writes: "We are making particular efforts to increase our trade in Europe, and by visits of our export department executives and the activities of our agents we are undertaking market research." A manufacturer of *cutlery* and *hollowware* writes: "Careful consideration is now being given to the question of packaging for the retail market, which may be of assistance in encouraging sales to Europe." A *furniture* manufacturer writes: "When we designed our most recent bedroom furniture we kept very much in view the probability of the FTA, and made an initial effort to produce items which could easily be knocked down for transport."

The number of manufacturers taking part in European trade fairs increases steadily. One of the most important tasks will be to persuade Continental buyers that Britain can produce good modern designs. One step in this direction is the possibility of displays of British goods in European stores. Last month 12 of the 20 *Designs of the Year* were on display and on sale in the Sundt stores in Bergen; the CoID is now co-operating with l'Innovation, an important department store in Lausanne, to stage a display of British goods there this autumn, and is investigating the possibility of similar displays in Holland, Denmark and France.

In an interview with DESIGN a representative of the Board of Trade maintained that any British manufacturer who has a good product to sell, and who is not entirely prohibited by import duties and licensing restrictions, can find a market in many European countries for his goods. Ultimate success, however, can only come through the personal efforts of manufacturers to study the needs of individual markets and to get their goods known and recognised in the CM and FTA countries. The letters DESIGN received from British manufacturers and Continental retailers point to an obvious lack of understanding between the two groups, and the need for closer co-operation between them; the incentive must of course come from the British manufacturer if he is to increase sales in this extremely competitive market. G.E.N.

A. A. R. Verhoog *of De Bijenkorf store in Amsterdam visited The Design Centre recently. He was examining the possibilities of holding an exhibition next February of British goods chosen from* Design Index *in the Bijenkorf and its affiliated retail stores in Holland.*

New forms for seating

Materials and processes

DENNIS YOUNG

Significant changes are taking place in the furniture industry; traditional practices are being more than questioned and design concepts have changed radically from those of the woodworking craftsman. In this article the historical background to the use of moulded forms for chairs is discussed, together with the economics of production. The author, who is himself a furniture designer, also deals with various materials which are suitable for moulding techniques in addition to the now familiar glass fibre reinforced plastics.

THE TRADITIONAL APPROACH to the manufacture of upholstered furniture is the production of a skeleton of solid wood members jointed together in such a way that voids occur in the parts of the chair where the concentrations of weight of a sitting body are greatest. These voids are spanned with combinations of webbing, hessian, springs, hair, etc, to produce resilient supporting areas. Through its combination of rigid skeleton and resilient areas of 'flesh and muscle', the traditional structure gives support and cushioning to varying body weights and sizes in an infinite number of sitting positions.

In the development of moulded chair shells there has been a tendency for their shapes to follow too closely those of the human form in a particular sitting position. This approach is suitable for chairs where only one basic sitting position is needed – as in a dining chair. The moulded shell can then meet the requirements in a similar way to the traditional Windsor chair, where the dished out seat and positioning of the sticks in the back developed from an empirical study of body contours.

On the other hand, in the design of moulded shell forms for occasional or easy chairs, allowance must be made in their shape for a variety of sitting positions, and also for the thickness requirements of the resilient materials used to upholster them. The use of moulded resilient materials such as latex foam, plastics foam and rubberised hair is a logical development in conjunction with the rigid and semi-rigid moulded shell. Resilient materials do more than give a feeling of softness, for they act as a moderating support under varying sitting postures and body weights, forming an integral part in the mechanics of comfort.

Eero Saarinen says of his well known large upholstered chair, **4**, which utilises a moulded shell: "The changing of one's position, in fact, the exercise you get from moving from one position to another, is an important factor often forgotten in chair design." Designing upholstered chairs using moulded shell forms is not therefore a simple matter of taking plaster casts of the sitting portions of the human anatomy, but is the careful co-ordination of materials and shapes to achieve both physical and psychological comfort.

During the last 10 years there has been a growing interest among furniture designers and manufacturers in the development of three dimensional moulded forms for chairs. The initial spark of this development probably came from the *Organic Design Competition* organised in 1940 by the Museum of Modern Art, New York. Its effect however was not felt in Europe until after the war. The competition was an inter-American one with prizes in the form of contracts with furniture manufacturers. Among the winning designs was the joint entry of Charles Eames and Eero Saarinen for moulded plywood chairs, **3**. To quote the book issued by the Museum of Modern Art covering the competition: "A significant innovation was that, in the case of the chairs designed by Saarinen and Eames, a manufacturing method never previously applied to furniture was employed to make a light structural shell consisting of layers of plastics glue and wood veneer moulded in three dimensional forms".

Two methods of production compared

Previous to this, one must refer to the two dimensional laminated wood forms designed by Alvar Aalto in the early 'thirties, **2**, and to the decorative moulded *papier mâché* chairs dating back to the middle of the nineteenth century, **1**. So that the prize winning designs of Saarinen and Eames, are in effect, a fusing of two constructional methods – laminated wood veneers and three dimensional formers or moulds.

In 1948, the Museum of Modern Art organised the *International Competition for Low-cost Furniture*. Here the spark of eight years earlier had been kindled to produce a considerable number of designs for chairs using three dimensional shell forms, with some from Europe as well as America.

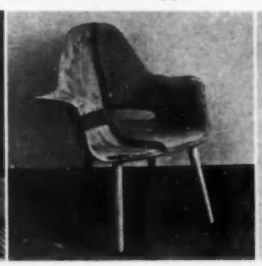
Once again among the prize winners was Charles Eames. To quote from the report on the competition: "This moulded glass fibre chair is in many respects an astonishing fulfilment of the ideas developed by Charles Eames and his occasional associate Eero Saarinen in 1940, when similar designs of theirs won first prize in the Museum of Modern Art's *Organic Design Competition*. The 1940 chairs produced in laminated plywood were the point of departure for many interesting designs by both these men, which are now on the market, but the chair presented here is closer to the original concept than any of the variations they have carried out during the 10-year interim. Now

continued on page 32

Papier mâché chair, mid-nineteenth century.

2 Laminated and bent plywood arm chair, Alvar Aalto 1932.

3 Moulded plywood chair, Eames and Saarinen 1940.

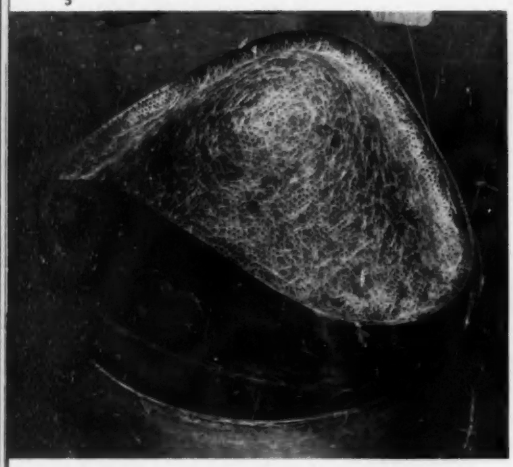


4 Moulded plastics and foam rubber chair, Saarinen 1948.

Glass fibre *reinforced polyester resin chair shell, quantity production with matched moulds by Microcell Ltd*

A glass fibre preform is first built up on the preforming machine. Glass fibre in the form of rovings is fed through a chopper at the top of the machine and falls in the form of short chopped fibres into a Plenum chamber. Inside the Plenum chamber is a revolving base on which a perforated grid former in the shape of the required shell is fitted. The chopped glass fibres are sucked down on to the revolving former, 5, until the required thickness is achieved. The revolving base can be tilted to get an even distribution of the fibres. The time taken for this operation is only a few seconds.

5



6

7

11

12

13

Wood wool *chair shell (suitable as a base for upholstery), hand lay-up by High Wycombe College of Further Education, Principal, W. J. Davies.*

During the last two years considerable research has been made by students of High Wycombe College of Further Education into moulded forms for chairs, under the instruction of W. H. Foulkes, research lecturer at the college.

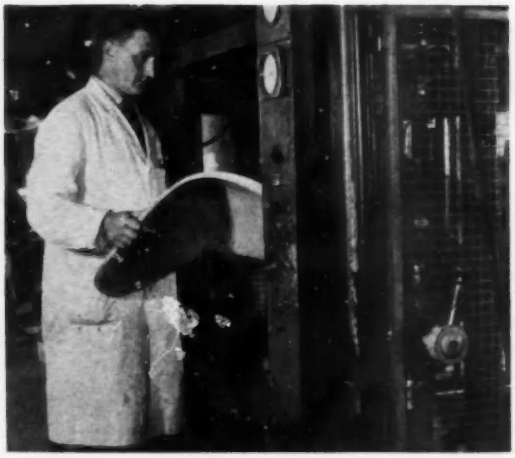
Glass fibre reinforced polyester resin and various types of chipboard mix were tried out. The chipboard construction showed considerable saving in cost over glass fibre reinforced plastics, but to obtain sufficient strength the shell had to be made about $\frac{1}{4}$ inch in thickness. To reduce the weight of the shell, wood wool was substituted for wood chips. The long strand structure of the wood wool gave a greatly increased strength to the shell at

The glass fibres on the former are then sprayed with a polyester water emulsion to bond them tightly together, **6**, and the former is removed from the Plenum chamber to an oven to dry out the moisture in the resin. After drying the glass fibre preform is removed from the perforated grid former, **7**, and inspected over a light box. After inspection the polyester resin is poured on **8**. Before the preform is placed in the press a surfacing veil of glass fibre is laid over the male former to give the inside surface of the chair an even distribution of coloured resin. The press works on an automatic cycle and on removal, **9**, the flash is cleaned from the shell by a knife and the edges rubbed with fine abrasive paper. The matched moulds used for the pressing of the shells are of chromium plated Kirksite alloy. These cost about a third less than equivalent moulds in steel; the cost for the chair shell shown here being about £800.

Bolts are bonded to the underside of the shell to give fixings for the tubular steel legs. The completed chair, **10**, is then fitted into a rig to test the leg fixings which exerts a backward pressure on to the shell, considerably higher than any which could be exerted in normal use.

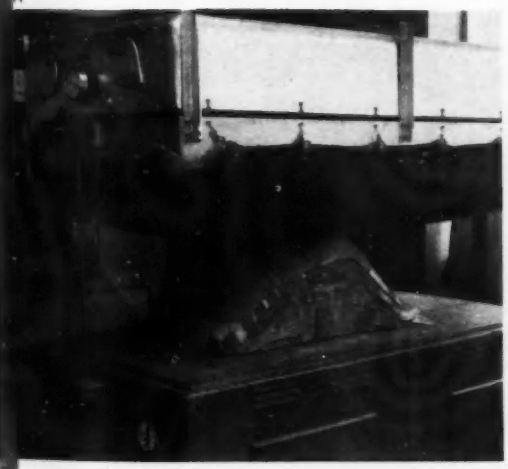
8

9



10

14



15

16

almost half the weight.

500 grams of pine wood wool are mixed with 500 grams of reconstituted *Aerolite* 306 and hardener *L* 58 (170 grams of water are included in the adhesive figure), **11**. The mixture is then ready for laying over the wooden male former, **12**, which has a ¼-inch rubber sheet bonded to it, rubbed over with a clear release agent. From four 1,000-gram mixes, 3,200 grams were laid over the former. As the wet wood wool mixture is laid over the former a polythene sheet is taped down to hold it in position. The mixture is spread to a thickness of 1½ inches in the centre of the former tapering out to ¾ inch at the edges.

With the mixture held in position a ¼-inch female laminated wood former is laid over the top, **13**. The former is split lengthwise down the centre and joined with a flexible rubber strip. This facilitates easy removal after pressing. The complete unit is then placed in a Schubert vacuum press for 50 minutes at a maximum temperature of 150°F and pressure of about 13 lb per sq ft, **14**.

On removal from the press the female former is opened and the wood wool shell taken off the male former, **15**. To complete the process the shell is dried out. This gives a weight reduction of about 25 per cent – the shell shown here weighed 3,200 grams wet and 2,400 when dried out. **16** shows the completed shell.

it has been possible to find a plastics substance and a moulding process", 19.

Having considered something of the background to the use of moulded forms for chairs it is necessary to deal with the economics of manufacture and with the different methods by which they can be produced. The prime interest to a manufacturer considering the use of moulded shell construction is in ensuring that the cost of the finished chair is comparable with that produced by more orthodox methods. The answer is bound to be closely linked to the output requirements and the length of time for which the model can be run.

Fashion changes and the desire for something new, are thoughts constantly in the mind of the furniture industry; change for change's sake so often over-ruling quality in design. Attempts towards a more stabilised approach in design can be seen in the furniture produced by Dux in Sweden, Arflex in Italy, Knoll Associates and Herman Miller in America and S. Hille & Co Ltd in this country. There are of course others, though the percentage in the industry as a whole tends to be small.

Until quite recently most moulded shell chairs i Britain were produced in small workshops by the han lay-up method on to male or female formers. Workin in this way overheads could be kept low and equip ment at a minimum. To enter into large scale pr duction suggests either the development of hand lay-u methods requiring the labour and space similar to shop producing traditional chair frames, or the install tion of expensive presses and matched-moulds.

In the production of a glass fibre reinforced plastic easy chair by the hand wet lay-up method some 20 to shells could be turned out per week from one mould The cost for the mould would be in region of £15 a the time taken to lay-up one shell would be abo half-an-hour. However, equipment for combined spra ing of chopped roving strands of glass fibre and resin h been developed which will save lay-up time. (*Furnitu Development Technical Bulletin* 39, April 1958.)

The production of a similar shell using matche moulds could give a weekly output of about 500 she

Dennis Young, *the author of this article*

17

18

Dennis Young first became interested in moulded shell forms for chairs through research he made in 1947–8 into sitting posture and comfort. The chair shell he developed, **17**, was in *Fibrenyle*, a jute reinforced plastics, and was laid-up with the plastics in the form of dough over a reinforced concrete male former. The shells were covered in fabric with latex foam in the seat and head rest. A number of the chairs was used in the *Festival of Britain* and an article about it appeared in DESIGN for July 1950.

The *papier mâché* chair, **18**, is a recent development of the earlier chair shape. The shell was laid up over a plaster male former cast from a clay shape. The surface of the plaster was sealed and a mineral oil release agent applied. Squares of kraft paper not exceeding eight inches were soaked in Dextrin paste and built up over the former, extra layers being put on where it was felt additional strengthening was required.

The shell was dried out with moderate heat and on removal fro the former, the edges were trimmed and smoothed off with glasspaper and the shell was ready for covering.

Papier mâché offers interesting possibilities for the manufactur chair shells as mould costs are very low and the basic raw mater paper, is cheap. In the past the process tended to be slow becau of the length of time required for the animal or vegetable glues t set. Today this problem can be overcome by the using of quick-setting synthetic resin glues.

During the last war pilot's bucket seats, glider wing tips, tail planes, etc, were made in *papier mâché*.

from one set of tools. The outlay in equipment would however be in the region of £10,000 to £15,000 – the matched moulds accounting for some £2,000. A discussion of the two methods appeared in John E. Blake's article *Glass fibre* (DESIGN February 1957 pages 24–9).

An alternative to the furniture manufacturer setting up his own matched mould pressing department is for the moulding to be undertaken by an outside specialist firm. This method would probably be the most satisfactory, not only from the economic viewpoint, but also because advantage can be taken of the technical 'know how' available in the specialist firm.

Materials and finish

In DESIGN for January 1957 F. C. Ashford discussed the possibilities of moulded wood pulp as a material for, among other things, the manufacture of moulded chair shells. The cost of moulds and presses would be similar to that for glass fibre, but the basic raw material cost would be lower, so that the final cost of the shells would be considerably less than for ones in glass fibre reinforced plastics. However, the surface of moulded pulp is dull and would therefore require some form of treatment, **20**.

For shells produced in *papier mâché*, **18**, ie, in sheet paper not wood pulp and using a hand lay-up process, the mould costs could be as low as £5, and the cost per shell in the region of £1 5s.

Using wood chips or wood wool we have a moulding process which in effect combines hand lay-up and press methods. Raw materials are cheap, but labour costs tend to appear rather high, although lower than wet lay-up methods with glass fibre and resin.

The methods of moulding and the materials used can both influence the appearance of the final shell. With matched-moulds glass fibre shells can be made in pleasant colours, with neither the inside nor outside surfaces requiring any finishing so that they could, and often are, left exposed. Using the wet lay-up method only one surface will be good – the one in contact with the mould. *Papier mâché*, wood chips and wood wool mouldings will have both surfaces rough and will require some form of finish. But in an easy chair covered completely with fabric, the quality of mould finish is of no great importance.

In traditional chairs the method of attachment of webbing, springs and covering fabrics relies mainly upon upholstery tacks driven into the wooden frame. With shell structures, new methods of attachment have had to be developed using adhesives, clips or other forms of fixing bonded to the shell.

Parallel with the development of moulded shells considerable work has been done in the use of removable covers. The term, 'loose covers' is generally avoided in the trade as it tends to suggest baggy, ill-fitting effects, but used in conjunction with modern upholstery materials, such as latex foam, plastics foam, rubber webbing, etc, removable covers seem to be a logical development, both from the point of view of manufacturer and customer. The covers are usually fixed by means of press studs, spring clips, zipp-fasteners, tapes, tension wires or combinations of these. (DESIGN April 1957 pages 32–5).

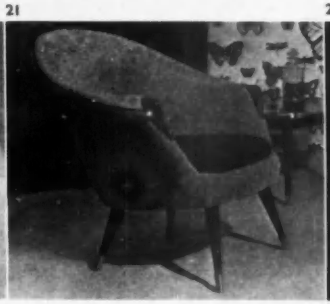
Although interest generally in three dimensional moulded forms for chairs is increasing, the field is, as far as the industry as a whole is concerned, largely virgin territory. This may be due perhaps to a reluctance on the public's part to accept the idea of, say, a glass fibre chair or it may be a reluctance within the industry to accept a process in which the modification of a design already in production would be more costly than in a traditional process. On the other hand, moulded forms offer an almost infinite variety of shapes and with the use of moulded shells for upholstered chairs the objection to finish does not arise. The fact that a moulded shell production line is less flexible than a traditional one could have indirectly a stabilising effect, for it would make it essential for the manufacturer to plan the design not only to meet the needs of the moment but to anticipate future demands. The classic example of this is the glass fibre arm chair, **19**, designed in 1948 by Charles Eames.

19

Arm chair in glass fibre reinforced plastics, produced with matched moulds. Designed by Charles Eames, 1948.

20

21



22

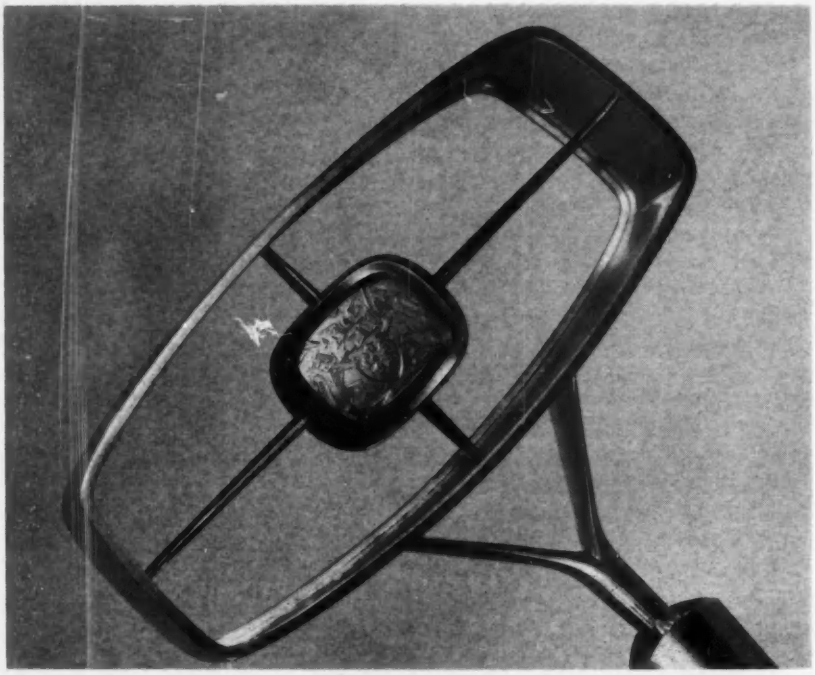
Other materials for moulding chair shells

Wood pulp and chipboard can be used in moulding techniques but their advantage in low material costs tends to be outweighed by other factors. In a Japanese wood pulp chair for instance, **20**, some form of surface treatment is necessary after the shell has left the press, and in **22**, a German chipboard shell moulded in two pieces, the strength to weight ratio is low.

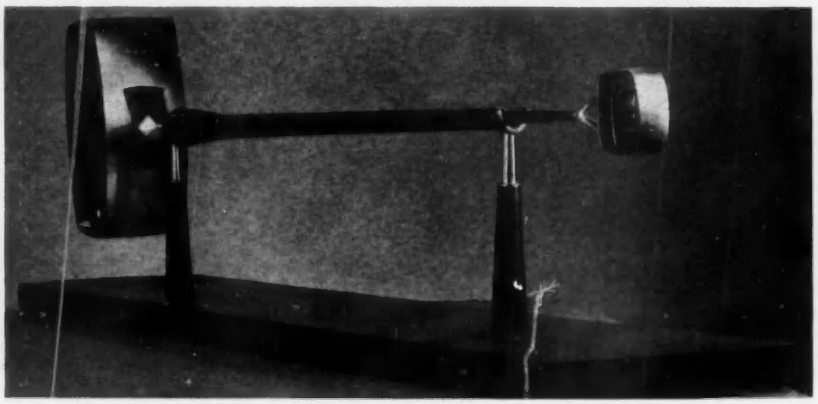
The *Rondo* chair, **21**, is produced by a new moulding method developed in Norway, for which Greaves & Thomas Ltd hold the patent rights in this country. The method allows variations in the thickness of the shell, thus reducing upholstery to the minimum. The shells are claimed to be light and strong. In the chair shown the shell is bonded to a wooden seat frame.

Dignity and defence

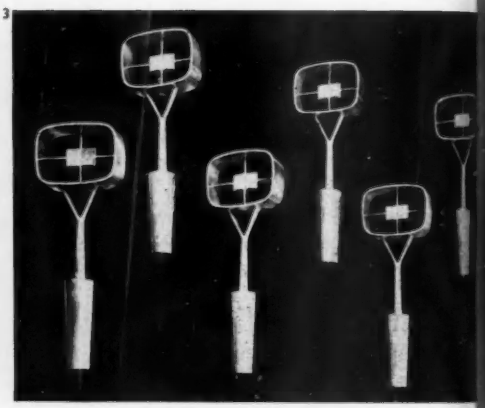
1



2



3

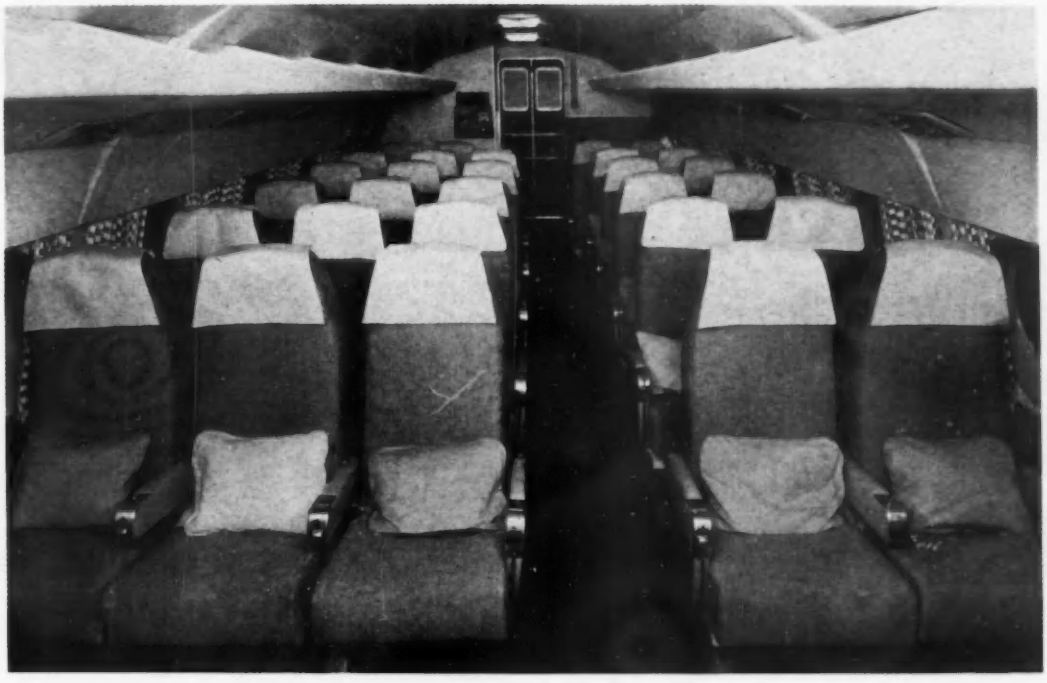


THERE IS A FIELD of design in which the overworked theory that form follows function is extraordinarily difficult to apply. This field consists of those designs, loosely called decorative, which as well as being modern in form must also embody and express certain specific meanings and emotions more often than not associated with the past. An example of this kind of design is a mace, where the designer, with no accepted decorative tradition to draw upon, is faced with evolving forms which are modern yet which add up to a suitable symbol of civic dignity and pride.

In essence a mace is a kind of medieval blunt instrument generally carried as a mark of office rather than for the protection of the officer, but it was the blunt instrument aspect that Gerald Benney concentrated on when he recently designed and made a mace for Leicester University, **2**. The mace, together with 10 attendant staves, **3**, was commissioned by the Lord Mayor and City Council of Leicester to present to the university to mark the granting of its charter; at the same ceremony, in May, a silver rose bowl, also d signed by Mr Benney, was presented by the universit chancellor, Lord Adrian.

The mace measures a little under four ft and is solid silver with the inner surface of the head fire-gilt 24-carat gold, **1**. The centre pieces of the he and base contain the coats of arms of the city and t university respectively. The staves are in black be with silver heads which echo the design of the ma head and carry the university coat of arms. Mr Ben who has designed two previous maces, one for Lond University and the other for the University of West Australia, Armidale, was given no limitations exc that the coats of arms of the city and the univers should be incorporated in the design and that the sign itself should be modern. The lack of limitati has very obviously paid off, for Mr Benney has integ ted in an elegant yet robust design the requirement modernity and ceremony; at the same time it would called upon, make a very effective blunt instrumen

New policy takes the air



Last year Gaby Schreiber and Associates, a firm of industrial designers in London, was chosen by BOAC (from a list of names submitted by CoID's Record of Designers) to develop an interior scheme for the corporation's passenger fleet. The scheme, which represents the first stage in the development of BOAC's new design policy, is described in the following article which refers particularly to its application in the Comet 4 shown above.

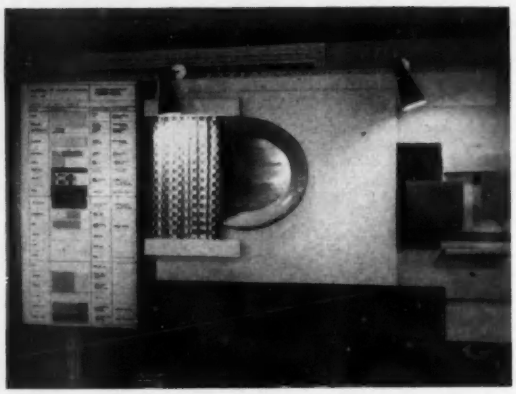
JOHN E. BLAKE

THE NEW INTERIOR SCHEMES for BOAC aircraft will be seen in full for the first time in the de Havilland *Comet* 4 due to come into service on the Atlantic route in December. BOAC and the de Havilland Aircraft Co Ltd, in recent months, have been pressing forward with various flights in the hope that Britain will become the first country in the world to operate a pure jet service on this most important of all airline routes. Neck and neck in the race is Pan-American Airlines with the early shorter range Boeing 707's, later to be superseded by the long range versions capable of flying non-stop from London to New York. In this fierce struggle to win the travellers' custom, not a little of the passengers' satisfaction will derive from the extent to which the design of the interior reflects and expresses the technical achievement of jet age travel.

American aircraft manufacturers and operators, with big home markets and the need to compete with highly organised road and rail transport systems, have understood this for some years. With the inauguration of the trans-Atlantic jet service it is timely that BOAC, almost entirely through the pioneering work of its advertising manager, Alec Jones, should have realised that something better was needed than the drab interiors that have existed until now, and the corporation is to be commended for its foresight in appointing an experienced

New policy takes the air

1



1 The first stage in the development of the new schemes. Simple displays, as shown here, and small scale models, were made to test the visual relationship of the various materials and colours. These displays were presented to BOAC for approval before the next stage, a full size mock-up, was started.

2

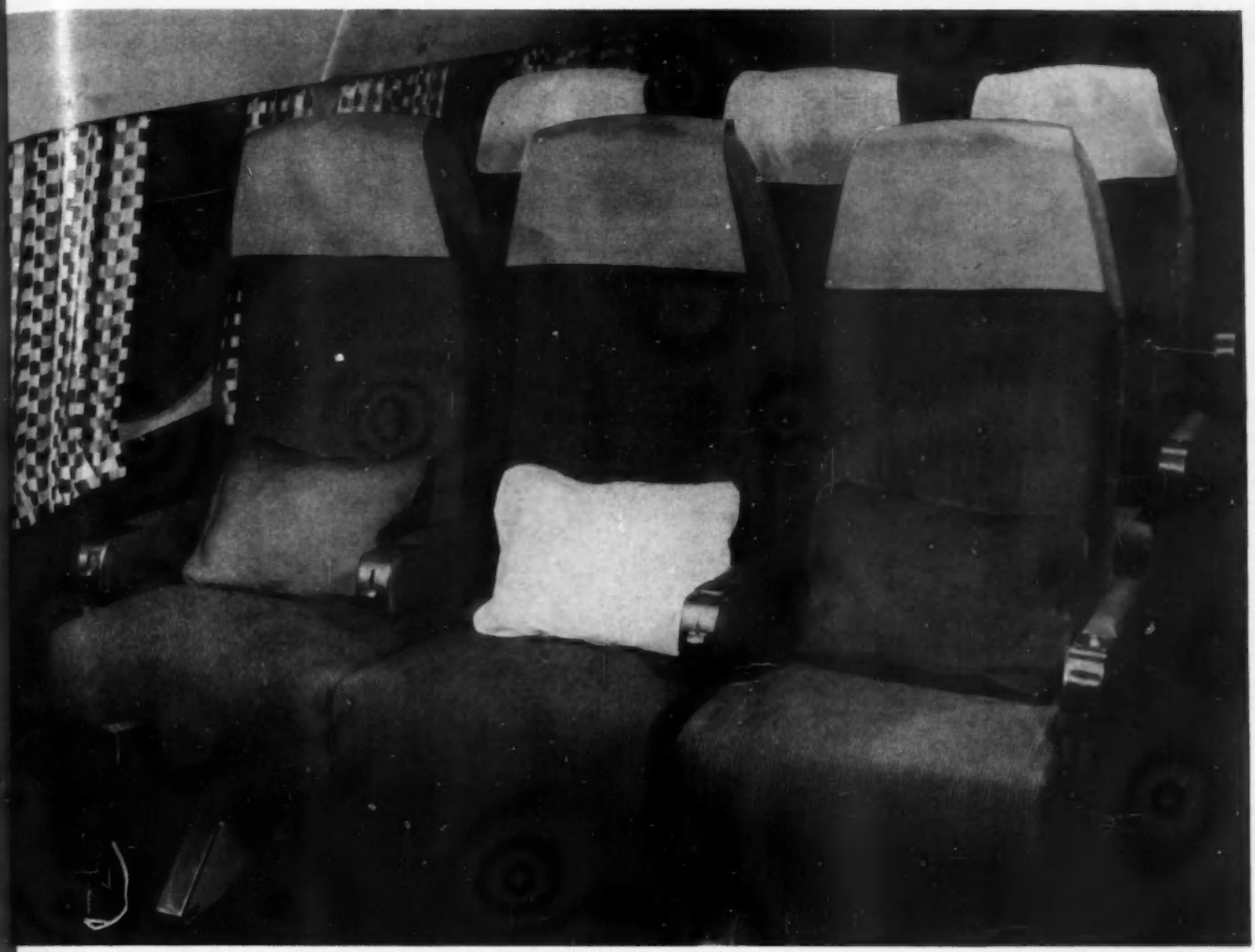
3

2 This full size mock-up of the interior was built in a fuselage of the *Comet* 4 that had been used for water tank tests. Apart from the value of trying out the colour scheme, galley and toilet arrangements, seating layouts and all other aspects of passenger accommodation were thoroughly tested here by the manufacturer before work on the actual aircraft was started.

3 The forward cabin fitted out here for first class accommodation with four-abreast seating by Microcell Ltd. The brown and white check curtains were specially designed by Margaret Leischner. Although the bulkhead seen at the rear is an improvement on earlier versions, the semi-circular arch lacks subtlety and could be better related to its surroundings.

4

4 While much ingenuity has gone into the design of this lavatory equipment (designed by de Havillands) the various shelves and projections create a cluttered appearance which tends to destroy the feeling of spaciousness needed in such a small compartment. Compare with the American-designed lavatory shown on page 60.



This view shows the general colour scheme that will be adopted throughout BOAC's fleet, the bright cushions creating the dominant colour note. The seats have been recently designed by Microcell Ltd for tourist and economy class travel. They incorporate a conventional reclining mechanism but introduce a new feature with tip-up seats and folding arm rests to allow easier passenger movement. Constructed of standardised components on a unit principle the seats provide considerable flexibility and allow the operator to assemble various combinations of seats from stock parts. Microcell has been awarded the contract for sleeper seats, first class, tourist and economy seats for BOAC's new fleets, including the *Comet* 4, Boeing 707, and *Britannia*.

design consultant to plan the work.

Mrs Schreiber, helped by her personal assistant Mary Darnell, has been concerned with both short and long term programmes. Her short term programme was to prepare quickly a general interior scheme which, once approved, was worked out in detail for each individual aircraft. She has conceived the scheme as a quiet background against which the passengers' clothing will contribute the main patches of colour. But if BOAC's new schemes are unobtrusive, they are far from dull. The designer's chief concern has been to break up the feeling of monotony which results from the repetition of row after row of seats within a long, narrow tube. Two basic groups of colours have been used to form alternating blocks of seating, each block comprising two or three rows of seats across the cabin. Emphasis to these blocks is given primarily by the linen head-rest covers – corn coloured to go with the coarse textured, oatmeal seat covering and stone leather arms; pale blue to go with the blue-grey seat coverings and turquoise leather arms. The continuous runs of green-blue carpet and warm oyster Synthede ceiling linings tie this counter-change of colour into a unity in which the bright and varied cushions create a modest sparkle.

Although shown here in the *Comet* 4, this standard colour scheme is gradually being introduced to the other aircraft operated by BOAC. In those already in service – Douglas *DC7C's* and some *Britannias* – the change is taking place in stages as the aircraft come in for routine replacements. Carpets, seat covers, curtains – in fact all the soft furnishings that are replaced fairly frequently – will be changed first. But the plastics

window reveals, wall linings, toilet finishes and other items of a more permanent nature will remain unchanged for a considerable time to come. Thus for perhaps a year or more some aircraft will be in service with a conflicting mixture of the old and new. While this may be a pity and will detract from the full impact of the scheme as designed, it will be almost impossible to avoid for financial and operational reasons, though efforts are being made to reduce this transitional period as much as possible.

A rather different problem has occurred with the Boeing 707's on order for BOAC, for the purchasing contract stipulates that only American materials may be used. The designer has had to prepare, therefore, a completely new specification for this interior so that it fulfills the contract but also fits in with the main BOAC scheme. Later when the routine replacements have to be made once the aircraft has come into service, the existing materials will be replaced by similar designs of British manufacture made specially for this aircraft.

In addition to the general furnishing scheme Mrs Schreiber was asked to develop a wide range of miscellaneous items that go together to complete an airborne house style for the whole fleet. Rugs and blankets, cigarette boxes, permanent covers for a variety of papers and magazines, with special racks to hold them, as well as the typographical design of all notices and labels, combine to show that BOAC has appreciated the full implications of its new design policy. Altogether over 600 items have been designed or selected and have been recorded on specification charts.

While these items have been pushed forward to give early results, the corporation has not overlooked its long term requirements. An important part of the designer's brief concerns these future needs. A new colour for passenger service trays is being prepared, while research into new furnishing materials is being carried out in conjunction with several British firms. Of particular interest is a study of lighting conditions and the eventual design of new equipment which it is hoped will improve considerably on current standards.

Gaby Schreiber, *the consultant designer appointed by B O A C to carry out its new design policy for aircraft interiors.*

Alec Jones, *B O A C's advertising manager who is largely responsible for B O A C's new design policy and who worked in close conjunction with Mrs Schreiber at all stages of the scheme.*

Two approaches

Seen in the context of the *Comet* 4, there can be little doubt that the new scheme is successful and will be popular among passengers. Yet a careful examination of the aircraft will reveal a number of features which detract from this success.

Two approaches to interior design are open to the aircraft manufacturer when he produces an airliner for sale. He may design the basic shape of the interior, the lavatories, galleys, luggage racks, lighting and passenger service equipment and a host of other items, leaving the individual airline to choose its own furnishing scheme. Or he may present his aircraft as an empty shell in which the airline can design the complete interior to its own requirements. Both approaches are capable of success, but both have their disadvantages. The first approach can be dangerous if the basic form of the interior does not suit the needs of all airlines, for to change it in special cases might involve delays and expense that could lose the manufacturer and t airline valuable custom. The second approach can al be dangerous if the manufacturer is selling to a numb of airlines all of which have different requiremen thus involving the multiplication of tooling cos Bristol and de Havilland have generally adopted t first approach; Vickers the second.

The disadvantages of the first approach are clea evident in the *Comet* 4 interior. The efficient functio design of the various items of equipment involv cannot be denied. The lavatory is a piece of high skilled engineering design and a lesson in space-savi ingenuity, yet it lacks the overall appearance of si plicity, the clean lines, the sense of style, that such interior requires. This essentially is the province of t industrial designer yet it is doubtful if a single industr designer is employed in the British aircraft man facturing industry. The effectiveness of Mrs Schreibe schemes in this aircraft will therefore be limited.

Future opportunities

How can the British industry improve this import aspect of its work? In America, in addition to t airline operators, the major manufacturers empl top-ranking design consultants who are concerned n only with the general design of the interior but al with the more specialist problems of seating. It is e couraging that one British aircraft seat manufactur Microcell Ltd now employs Gaby Schreiber a Associates to advise on styling and colour. This tea producing a new seat to BOAC's specification f the British-operated Boeing 707.

This is a useful beginning, but its isolation o serves to emphasise the extent of the ground still to covered. The difficulties of bringing industrial d signers into new fields of activity have been tackled a overcome elsewhere – the British Transport Co mission, for example, has shown in its modernisati programme how designers have been introduced to t carriage and locomotive industries and are now worki successfully on a wide range of projects. Here the Co through its Record of Designers, can give much helpf advice to those firms who appreciate the contributi that the industrial designer could make.

A new opportunity for the British industry exists the Vickers *VC*10 which is due for service in 1963. T aircraft is being developed exactly to BOAC's spe fications and therefore presents an ideal case for t interior designed as a complete and integral unit by t purchaser – the second approach mentioned above. T fact that Mrs Schreiber has already been asked begin work on this project at the earliest possible st is further confirmation that BOAC is seizing ev chance to develop its new policy to the full.

It must be remembered, however, that the major of transport aircraft are built speculatively for t markets of the world and cannot rely on a single ope tor to provide a basic interior to suit all customers. these circumstances it is becoming increasingly nec sary for British aircraft manufacturers to employ th own industrial design teams.

Problems for a pace-setter

an introduction to the third book of Palladio wallpapers

WYNDHAM GOODDEN

Wyndham Goodden, *the author of this article, was until recently professor of textile design at the Royal College of Art.*

THE INTRODUCTION, by the Lightbown Aspinall branch of the Wall Paper Manufacturers Ltd, of the first two Palladio collections was a major event in the decorative arts of this country. Mostly large in scale and strikingly original in design, they were produced less for the general public than with a special eye to the requirements of architects and interior designers. They were an immediate and deserved success. Such a consistently high standard of design had never before appeared in one portfolio, commissioned and printed by the same manufacturer, and produced in quantity. Whether this triumph was due to the faith and vision of a hitherto not very experimental industry, or whether it was entirely due to the persuasive arguments of Richard Busby, managing director of Lightbown Aspinall, is not for the reviewer to enquire: but the credit for the choice, presentation and policy is certainly due to the latter. The effect of these collections, moreover, has been to act as a standard bearer to raid the public field as well: encouraged by the success of these, more and more good papers, not designed for architects and decorators alone, are appearing in the cheap and popular ranges.

The third Palladio collection is now presented, and it is interesting to compare it with its forbears. One cannot expect the latest volume to be so far in advance of its contemporaries, because of the standard already set and maintained by its predecessors. It is part of the achievement of earlier Palladio ranges (the second is still in production) that the gap between the special and the general field should be gradually closing. Some successes in the first volume, *Brackley Weave* and *Locomotion*, for instance, are carried forward into this; unavoidably giving a sense of greater familiarity – if of continuity too – with the new collection. There are fewer shocks and surprises of pure pleasure. But there are some new names – new to Palladio, that is – and at least one of the best designs is associated with them. Audrey Levy and the Nicholson Brothers emerge as the dominant hand-writings, and begin to be household names in the sense that one associates Lucienne Day and Paula Vezelay with Heal's. These three Palladio designers seem to have a really astonishing *rapport* with wallpaper designing at its best, though this reviewer is by no means certain that their best designs are in this particular collection. Audrey Levy, triumphant with *Phantom Rose* as the wallpaper *Design of the Year* 1958, (she was also a winner in 1957), makes another sparkling contribution – as original in technique as was her *Rose* last year – with *Pebble*, illustrated here. Although there are an enormous number of textural papers already on the market, *Pebble*, which certainly comes into this class, is as fresh and pretty as its name implies.

The Nicholson Brothers seem to chase each other in spirals up the tree of fame. Last year it was Robert who gave us a delicate, almost Victorian, floral with elegant arcaded borders: this year a looser, still more delicate floral, *Clematis*, comes from Roger. This kind of continuity is perhaps a thing to be watched with some apprehension – as well as with gratitude. Is there just a hint, in this new collection, of beginning to follow the primrose path of replacing a successful line with something like it, but – if we remember similar patterns of commercial thought – not quite so good? There was a famous lion in Palladio book two: so there is another lion in book three, by the same designer. There was a famous rose in Palladio book two: so there is another rose in book three by the same designer. There was a splendid bird in Palladio book two: there is another bird, by a *different* designer, in book three. No-one will blame Mr Busby for sticking to his favourites, still less for working hand in glove with well tried designers; but a slight feeling of disquiet, seeming to recognise the beginnings of an all too familiar phenomenon, did and does afflict one reader on turning the pages of this often fine collection.

Illustrations of patterns from the collection are shown overleaf.

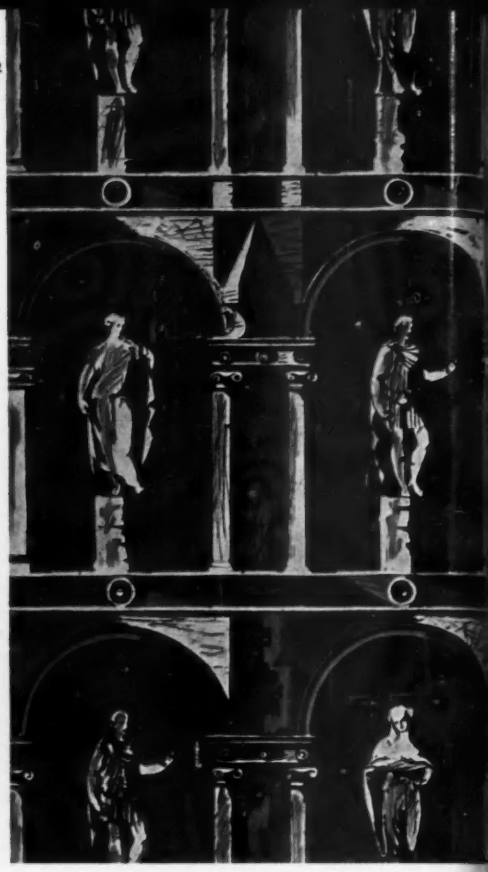
Problems for a pace-setter

1 *Maze* A paper whose decorative qualities carry a penumbral memory of aerial photography and perhaps even of town planning – a new approach to design noticed again on the opposite page. DESIGNER *Audrey Levy*. Three colourways. *From £2 7s 4d per piece.*

2 *Montacute* A formal design handled with great freedom and bravura. The name is misleading to anyone who knows Montacute, but the paper is none the worse for that. The colourways are particularly good. DESIGNER *Roger Nicholson*. Three colourways. *From £3 9s 11d per piece.*

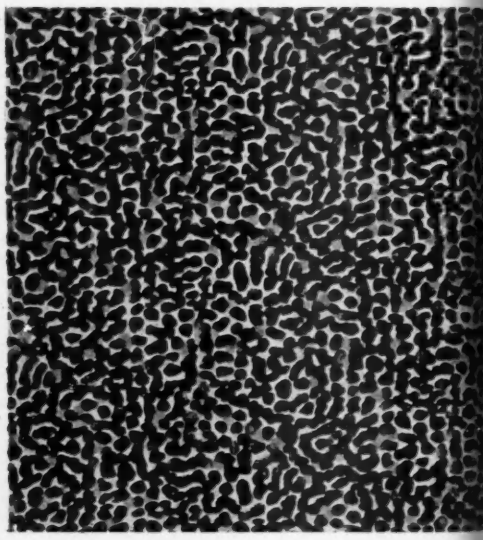
1

2



3

4



3 *Clematis* Clearly belonging to the new evocative phantasmal approach in spite of its superficial elegance. The conventional treatment of flowers is reminiscent of other times and races, fair tales illustrated by Dulac, the Pre-Raphaelites, and Indian and Persian miniatures. DESIGNER *Roger Nicholson*. Two colourways. *From £2 15s 11d per piece.*

4 *Pebble* Already noticed in the text and shown here in the best subtlest of its colourways. One of the first designs to emerge fr tachism, combining this school's boldness and freedom with th discipline of formal textures. DESIGNER *Audrey Levy*. Three colourways. *From £2 7s 4d per piece.*

Retail prices quoted include purchase tax

Reviews of Palladio wallpapers in DESIGN: December 1955 page 22; March 1957 pages 33–5

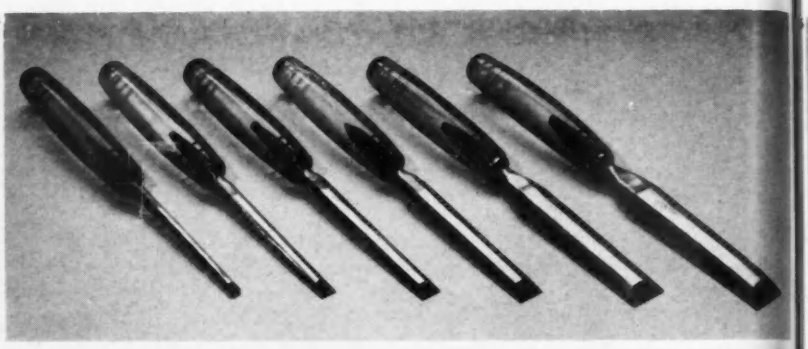
5 *Treescape* This paper is shown more fully because it demonstrates most clearly the interesting new approach to design found in the third Palladio collection. Coming as it does from more than one designer simultaneously, this approach is all the more significant and forceful. The impact of this paper is evocative and haunting in the first instance, and decorative only in the second. Hitherto it can be said that all textile and all wallpaper designing has been decorative first and foremost. This may be the beginning of a new romantic school, and is certainly the first clear movement to emerge from the well worked seam of purely abstract design. DESIGNER *Audrey Levy*. Four colourways. *From £2 8s 5d per piece. Table by J. W. G. Payne; lamp by Geni Products.*

Review of current design

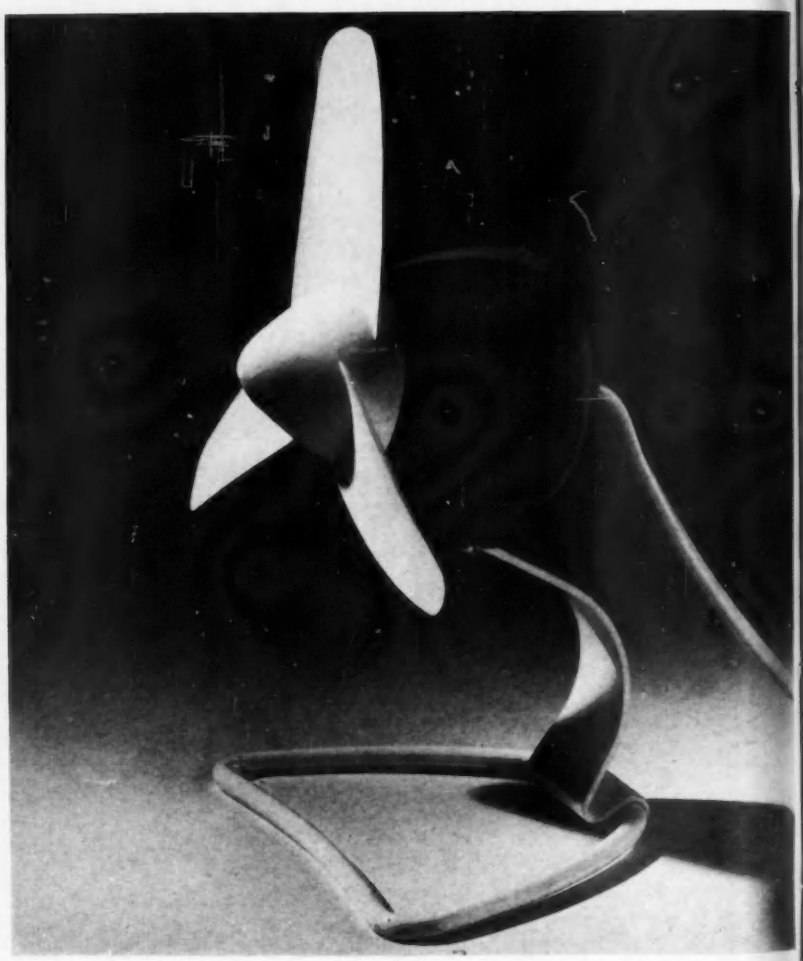
A selection of items recently accepted for inclusion in 'Design Index', the CoID's photographic and sample record of current well designed British goods. 'Design Index' forms an essential part of The Design Centre, 28 Haymarket, SW1, which is open on weekdays from 9.30 am – 5.30 pm, and on each Thursday until 7 pm.

1

2



3



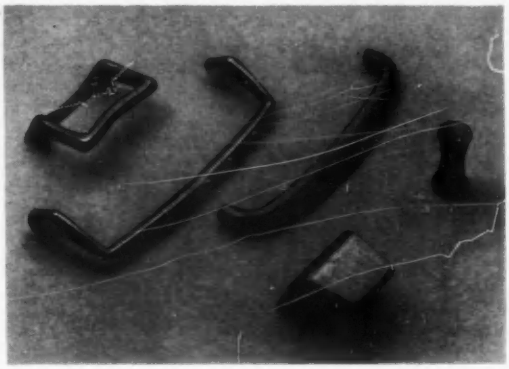
All retail prices quoted *are approximate and include purchase tax where applicable.*

1 Occasional table in natural finished afrormosia solid timber. DESIGNER *John J. Herbert*. MAKER *A. Younger Ltd.* £14 16*s*.

2 Bevel edge firmer chisels with crucible cast steel blades and translucent amber moulded cellulose acetate handles. DESIGNER *S. Walker*. MAKER *J. Stead & Co Ltd. From* 11*s* 3*d to* 13*s* 6*d*.

3 Personal fan for office desk, dining table, etc, in pressed die cast zinc and polythene with stove enamel finish in white and blue. DESIGNER *John Barnes of Allen-Bowden Ltd, in collaboration with the firm*. MAKER *H. Frost & Co Ltd.* £2 17*s* 11*d*.

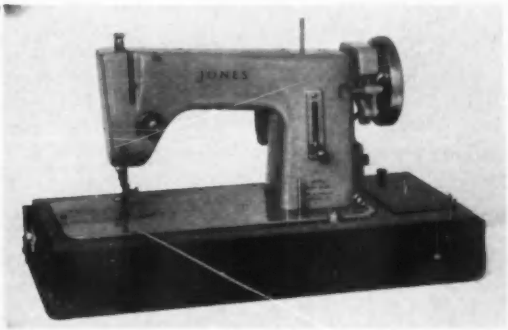
5



4 Lead crystal glass vase in marina green, topaz, claret and other colours. DESIGNER *Doreen Norgrove.* MAKER *Thos Webb & Sons.* £3 8*s.*

5 Furniture handles in brass plated mazak (with invisible fixing). DESIGNER *S. Frosh.* MAKER *S. Greenman Ltd. Prices from maker.*

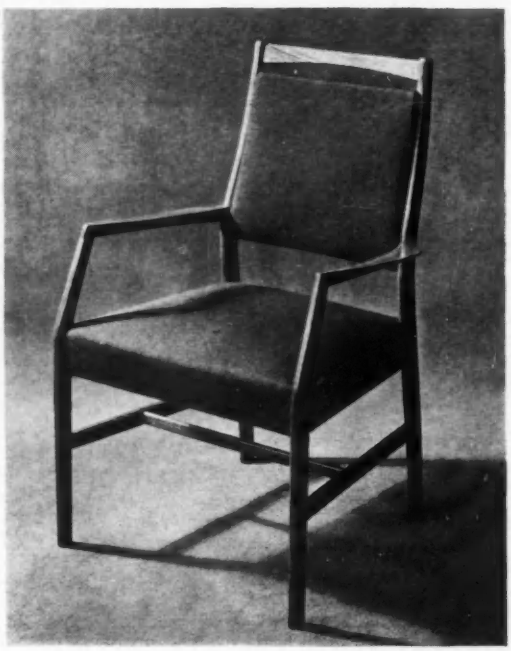
7



6 *Fiesta Melmex* nesting soup bowls in polished melamine, finished in *House & Garden* colours. DESIGNER *Ronald E. Brookes.* MAKER *Brookes & Adams Ltd. 5s each.*

7 Portable electric sewing machine (central bobbin model C). Stove enamel finish in various colours on cast iron and aluminium die castings; bright parts chromium plated. DESIGNERS *F. R. Littlewood and J. Beresford-Evans.* MAKER *Jones' Sewing Machine Co Ltd.* £47 2*s* 6*d.*

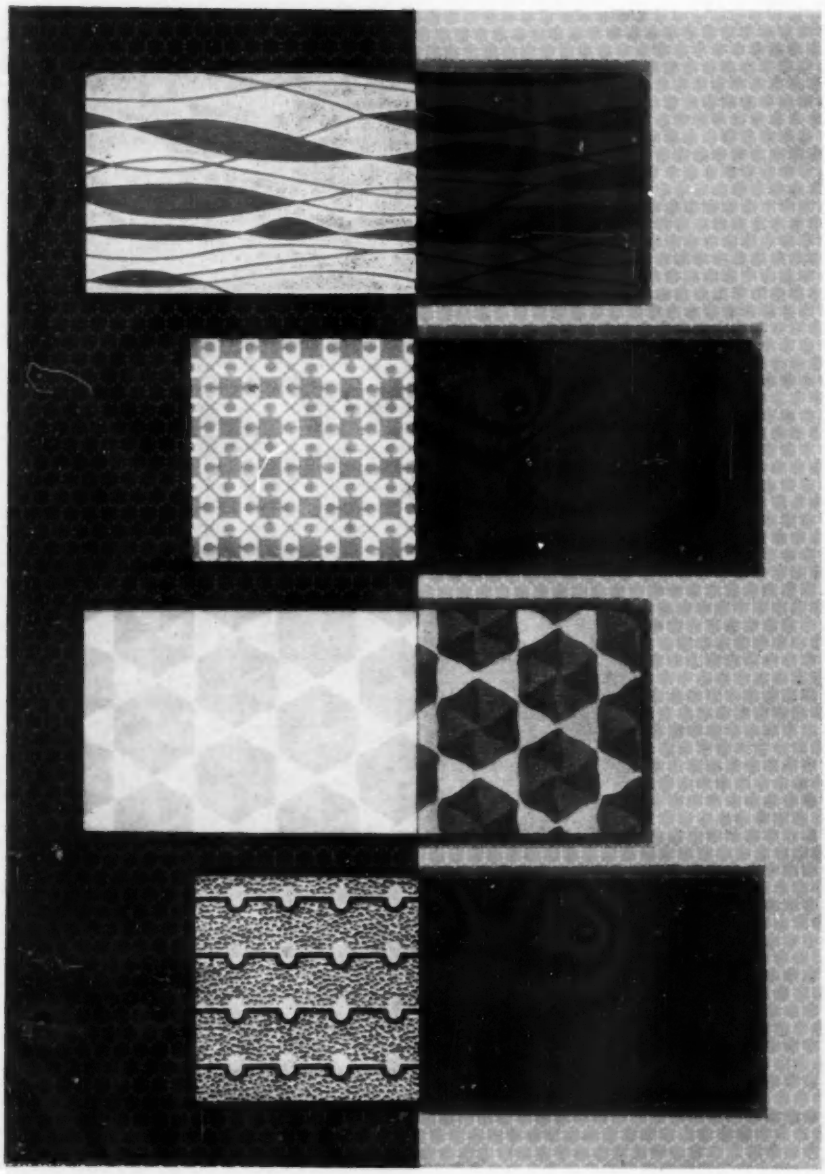
9



8 *Fleetline* tubular steel folding platform step ladder in blue polychromatic enamel finish with grooved hardwood treads. MAKER *Fleetway Manufacturing Co Ltd.* £3 8*s* 6*d* (3-*tread*), £3 16*s* 6*d* (4-*tread*), £4 9*s* 6*d* (5-*tread*).

9 Arm chair in mahogany, ebonised or cellulosed; upholstered in rubberised hair and wadding with cover of hide or customer's own material. DESIGNERS *Tom Lupton and John Morton.* MAKER *L M Furniture Ltd.* £18 18*s* (*customer's material*), £24 16*s* (*hide*).

Effectively small scale



A NEW RANGE of Decorplast laminated sheet plastics, introduced by Holoplast Ltd, supplements the firm's earlier designs which have been on the market for five years.

It was felt that if Decorplast were to hold its own against its vigorous competitors it would have to be equipped with a better range; and having decided this, Holoplast took two essential steps. First, a thorough market research survey was carried out to assess the existing patterns, the probable competition and future market requirements. Second, a firm of well qualified designers, chosen as a result of recommendations made by the CoID's Record of Designers, was appointed to prepare the new range.

The designers, Ward and Austin, were given a straightforward brief. They were told no more than the results of the market research survey, and that about 50 colour and pattern combinations could be included.

It seems clear that when producing a new range in this field the greatest possibilities exist in the development of small scale patterns, because the most striking designs by other manufacturers are large in scale and boldly assertive in colour, while their smaller patterns tend to be anaemic. Ward and Austin felt that the new designs should be mainly composed of clear lively colours, and have evolved 15 basic colours for the sheets with six patterns (one being retained from the earlier range). The manufacturer arranged for all combinations of colour and pattern to be made up, and from these a careful selection was made to give a balanced range.

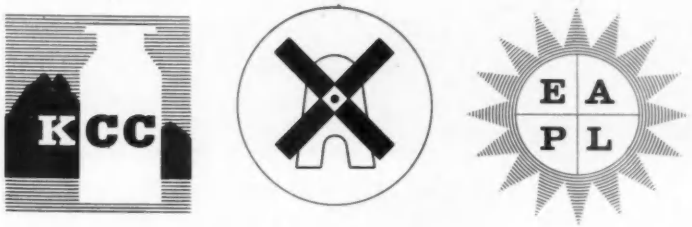
The result is a fresh and practical range, of 47 designs, including both patterns and plain colours, that fills an obvious gap in the market. The small patterns, which make up the bulk of the range, are frankly man-made and mechanical, and clearly distinguishable when seen close to. Some slightly larger designs are also included, but these remain clearly and precisely drawn and in no case could really be described as large patterns. This is wise, for while striking designs might embolden a leaflet or swatch of samples their use is mainly confined to the contract market, to meet specific requirements, whereas the small scale Decorplast patterns should be particularly appropriate for small areas such as coffee tables, work surfaces and for wall coverings where they are not required to dominate.

Here then is a welcome addition to the ranges of decorative sheet plastics already available. The Decorplast range is not unusual or startling: it is attractive and useful. It is a good example of the way designers can combine imagination with commonsense. No one will say "They must have had a designer in" – and that is one of the highest compliments that can be paid to a designer.

STEPHEN GARRETT

Five of the six patterns in the new Decorplast range are shown here actual size. The patterns are *Honeycomb* (in the background) available in 10 colourways, and from top to bottom *Fiesta* (three colourways), *Hopscotch* (eight colourways), *Carousel* (three colourways) and *Radar* (three colourways). They are available with a matt or gloss finish; the sheet can be patterned on both sides if required. The standard thickness is $\frac{1}{16}$-inch, but $\frac{1}{8}$-inch sheet is also available. The price is 4s per sq ft ($\frac{1}{16}$-inch sheet).

Old and new symbols for East African industry. Herbert Spencer has redesigned the house marks, shown here, for Kenya Co-operative Creameries Ltd, Unga Ltd and The East African Power & Lighting Co Ltd. The new designs are characterised by letters with heavy serifs.



House style by remote control

ALEC DAVIS

To EVOLVE a house style for a client 3,000 miles away cannot be easy. But it has been done, and done successfully, by Herbert Spencer in London for three companies in East Africa. This involved putting every thought on the subject into writing – a large volume of correspondence was inevitable between designer and client; colours that would stand up to the African climate had to be chosen – which meant consultations between the designer and ink and paint manufacturers; and it was necessary to work through an intermediary. This, however, was not the disadvantage it might have been. The clients' wholehearted acceptance of Mr Spencer's recommendations can be attributed in part to the clear briefing which he received from Alan Hall and Michael Dunford of Nairobi, public relations consultants to all three companies, and their grasp of the designer's and clients' problems.

The firms concerned were Kenya Co-operative Creameries Ltd, Unga Ltd, millers, and The East African Power & Lighting Co Ltd. Appropriately for such different industries, the house styles are very different, but the designer's approach was basically similar for all three.

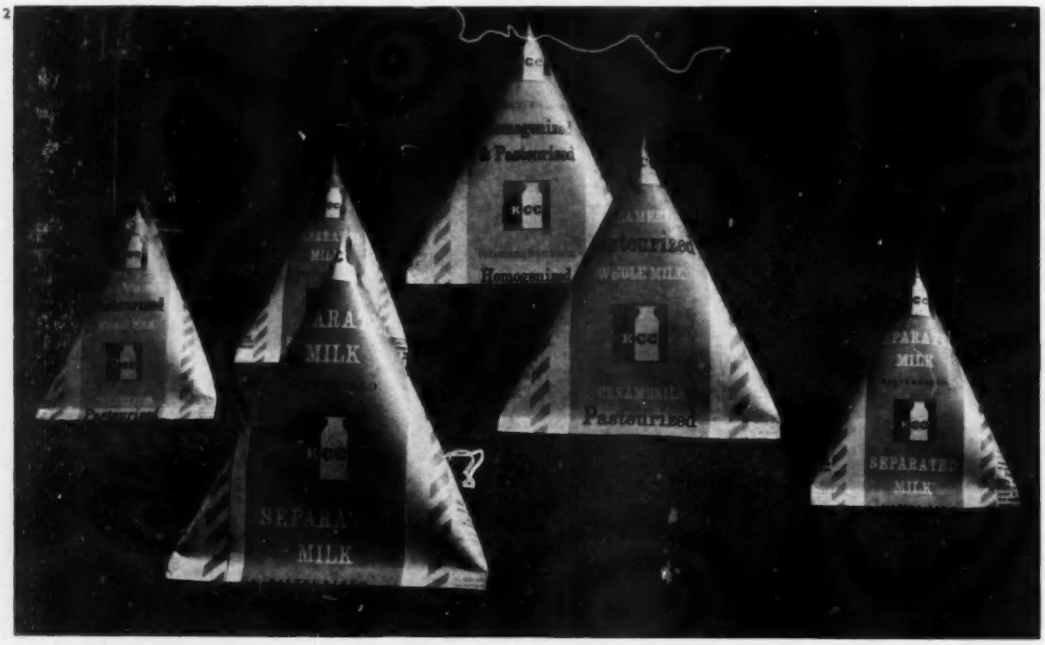
House marks were redesigned (and simplified in the process). Colour schemes were established for vehicles, print, and where applicable, packaging. For some items of printed matter, blocks were made in Britain. For others, a typographical style employing type-faces available locally – to be interpreted in East African advertising agents' and printers' studios – was evolved by Herbert Spencer in London.

The Creameries' house style, first seen in its vans, aroused so much interest locally that it undoubtedly helped to pave the way for later developments.

Examples of the three house styles are shown on the following pages ▸

1

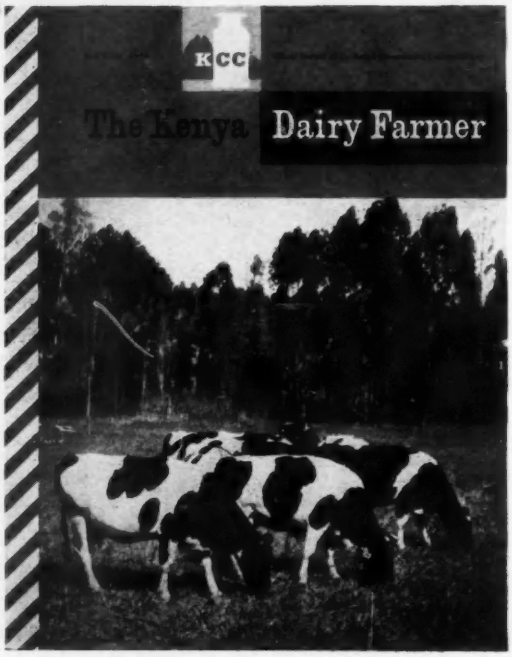
2



3

4

5



Kenya Co-operative Creameries Ltd

Diagonal stripes in orchid purple characterise the new house style of Kenya Co-operative Creameries Ltd, seen here in one of the firm's vans, 1, its Swedish-patented *Tetrapak* milk cartons, 2, butter cartons, 4 (compare 3 – before redesign), and on the cover of its house magazine, 5. The type face prominent here is Stevens Shanks' Antique No 3.

6

UNGA LIMITED

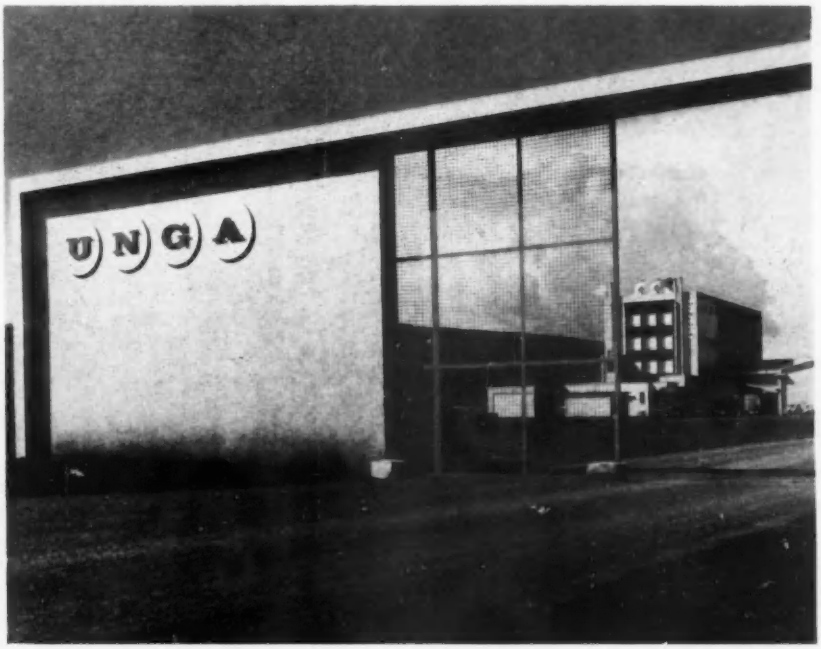
Unga Ltd

The name-style, **7**, originated by Herbert Spencer (**6**, shows part of the original letterhead) has been aptly used by the architect of new Unga mills, **10**. Unga lorries in old and new styles are shown in **8** and **9**. The colour scheme is now red, black and a muted yellow suggestive of ripening corn.

7

UNGA Limited

10



Branches at
NAIROBI, MOMBASA NAKURU
ELDORET, KISUMU, KITALE
AND NANYUKI

HEAD OFFICE

THE EAST AFRICAN
POWER & LIGHTING CO., LTD.

ELECTRICITY HOUSE
NAIROBI
KENYA COLONY

Telephone: 21251
Telegrams: "ELECTRIC" Nairobi
Code: BENTLEY'S 2ND ED.
P. O. Box: 601

Your Ref:

Our Ref:

19

The East African Power and Lighting Co Ltd

E A
P L

P.O. BOX 30099, NAIROBI, KENYA Telephone 21251
Telegrams Electric Nairobi

The East African Power & Lighting Co Ltd

Old and new letterheads, **11** and **12**, for The East African Power & Lighting Co Ltd. Gill Sans is used in the more utilitarian kinds of print for this company, and Times Roman in the more formal. EAPL vehicles are now painted blue, with a transfer on the doors in blue, black, yellow and white echoing the design of the symbol seen on the letterhead.

Jack Howe, *the designer of the lamp-post discussed in this article.*

1 One of the double bracket *Trifoil* columns on the New Cromwell Road, London.

DESIGN ANALYSIS 10

Lamp-post

MAKER *AEI Lamp & Lighting Co Ltd.* DESIGNER *Jack Howe.*

From reports in the National Press it is clear that strong views on the design of lamp-posts are held by wide sections of the public. Many of the statements made, however, reveal that misleading conclusions are often drawn from an inadequate understanding of the facts. In this article, the tenth in the series, the authors have attempted to clear up some of these misunderstandings and have chosen a design, one of the best of its kind, to illustrate some of the wider problems with which the designer is faced. Although the CoID is concerned only with the design *of lamp-posts,* siting *is of equal importance and is therefore also considered in this article. Manufacturers are normally asked to comment on the articles in the* Design analysis *series, but AEI did not feel that further comment was necessary here.*

L. BRUCE ARCHER
PETER WHITWORTH
J. BERESFORD-EVANS

THE BASIC FUNCTION of a lamp-post is to support a light source of a particular type above the road at a predetermined height. The criticisms that have been voiced in the Press are concerned not with this basic function but with the means of achieving it.

Thus concrete, one of the materials most commonly used today for lighting columns, has been a particular object of attack. But while many concrete columns deserve the criticisms levelled against them, we have attempted to show, in the following analysis of the *Trifoil* design, that the material is capable of many refinements if treated imaginatively, and can contribute something of value to its environment. It will also be seen that some faults attributed to the design of the column are more often due to siting or some other factor outside the designer's control.

Optical requirements

For the purpose of this article we have accepted the optical principles laid down in the British Standard Code of Practice* in so far as they affect the overall dimensions and appearance of the column.

The essential requirement for lighting main traffic routes passing through urban areas (Group A installations) is to enable motor vehicles to proceed in safety at the permitted speed without headlights. The principle generally adopted today is that of silhouette vision – the illumination of the carriageway, footways and background with a uniform brightness so that objects on the road stand out as silhouettes. To provide this, and at the same time reduce glare from the light source, a lantern height of 25 ft is recommended for general use, with heights of up to 30 ft at important road junctions.

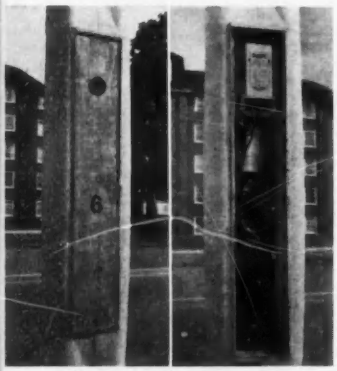
* BS Code of Practice CP 1004: part 1: 1952, and part 2: 1956.

With these dimensional limitations as a starting point, the designer's task will be concentrated on refining a simple post and bracket configuration. However, many other considerations will influence his approach.

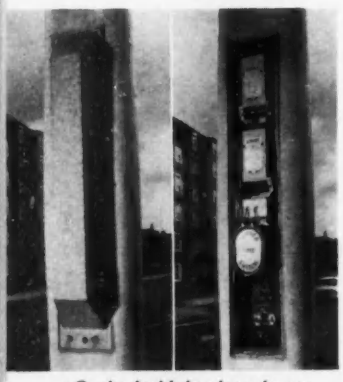
The material – structure and cost

As can be found elsewhere in the industry, there is little agreement on the relative merits of the different materials available. The initial cost is important but is not the only consideration. The cost of a Group A reinforced concrete column varies from about £19–£22 compared with £20–£25 for pre-stressed concrete and £19–£23 for steel. Maintenance costs are likely to be given greater attention by the local authority and here concrete, both plain reinforced and pre-stressed, is often preferred since little maintenance is needed once the lamp-post is erected. Steel and cast iron need to be painted every two to five years at a cost which is considerable. On the other hand some public lighting engineers consider that the effective life of steel and cast iron columns is much longer than that of concrete and that in the course of time cast iron and steel are cheaper. Others claim that road lighting requirements will change so rapidly that even the latest columns may need to be replaced within 20 years and that a long life for a lamp-post is not of vital importance.

While consideration of cost may indicate a strong preference for concrete other matters make it less suitable. In close urban environments the danger of collisions with lamp-posts must not be ignored. Though concrete itself is brittle and will crack easily, the mild steel bars used in simple reinforced concrete have been found sufficient to hold up a column after a heavy



2 In this single bracket version the electrical control gear is housed behind a flush fitting door so that the control box becomes an integrated part of the whole design.



3 On the double bracket columns the electrical gear is duplicated and the projecting time switch necessitates a blister cover which vitiates the whole conception of an integrated box. Though smaller gear is available local authorities are reluctant to change from designs they are familiar with. In this case the problem could have been foreseen by the designer and a longer box provided.

collision. Pre-stressed concrete columns on the other hand have been found to snap completely on impact causing considerable damage. Both types are subject to the danger of fracture and subsequent corrosion of the metal reinforcement. The ability of steel columns to yield plastically under excessive load makes them generally preferable from this point of view. On balance, however, AEI felt that reinforced concrete offered the greatest advantages and the designer was briefed to develop the lamp-post in this material.

The material – appearance

Perhaps the chief criticisms of concrete lamp-posts concerns their colour and thickness. The greyish white of concrete is certainly less suitable in some urban areas than it is in more open locations with plenty of trees. Experiments in colouring concrete have already been made but much more could be done on these lines. The thickness of concrete columns is also connected with this question of colour, for a light coloured column will always look thicker than a dark one. Nevertheless concrete lamp-posts are undoubtedly thicker than those made of metal due partly to the structural requirements of the material and partly to the need to house the often cumbersome electrical control gear. The deadload and wind stresses that a column is required to withstand may be less than those exerted during transportation, erection and striking the mould, and do not solely determine the sectional dimensions of the column.

Electrical control gear

Traditionally the electrical control gear for lamp-posts has been placed in the base of the column so that the shaft above could be as slim as structural considerations would allow. The disadvantage of this arrangement is that it makes access to the control gear difficult. The designer of the *Trifoil* has therefore moved the control gear from the base to a position at roughly shoulder height so that service engineers can carry out their work in greater comfort with more speed and consequently less cost. The visual effect of doing this has been to lift the weight above the ground and support it on a base of minimum area.

The fact that smaller control gear is available which would have allowed the control box to be smaller and the whole column slimmer is not, at the present time, of much help. The current practice by which the local authority specifies the control gear for its own area, makes it necessary to incorporate control boxes to house the largest types of control gear that are on the market. Even so, the double arm *Trifoil* columns on the New Cromwell Road, London, contain control gear which is too large for the standard box, with the result that the box door has been made into a blister which breaks the otherwise smooth line of the shaft. It is very much to be hoped that the time will shortly come when local authorities will accept lamp-posts in which the column and control gear are designed and sold as an integral unit. When this happens we shall be able to see concrete lamp-posts that are considerably more slender and elegant than they are today.

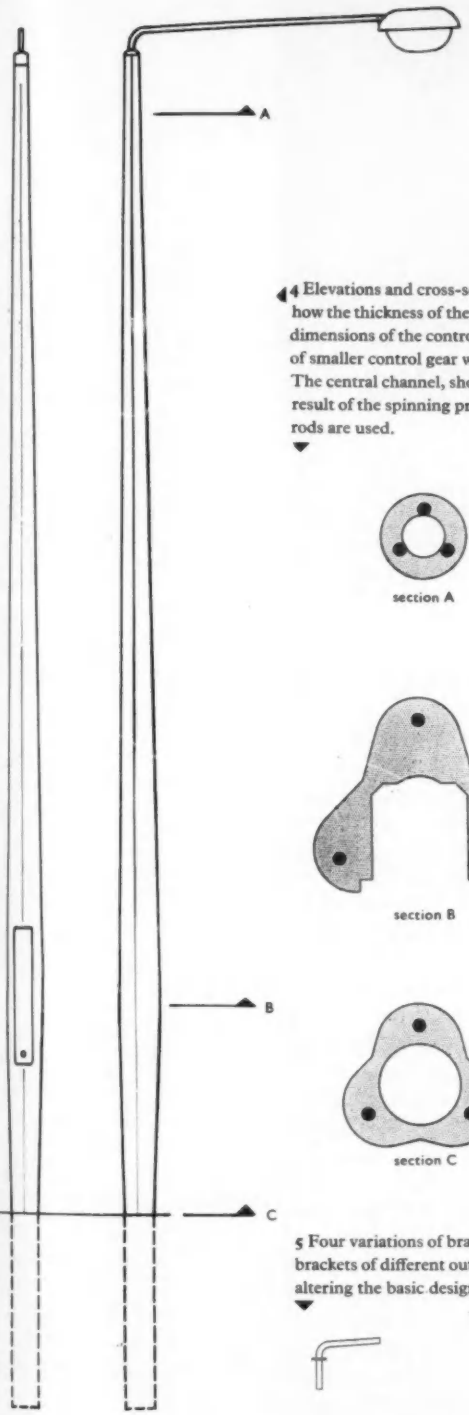
Manufacture

The *Trifoil* is made by a spinning process in which the material is thrown by centrifugal force against the walls of the mould, creating a densely compacted shell of great strength and at the same time forming a cavity in the centre. This process also tends to leave a cement slurry on the surface, which if complete and even over the whole column gives a smooth finish which lends unity to the shape. It has a disadvantage, however, in revealing any imperfections which exist in the mould. Consequently successful manufacture depends largely on the care and attention which are given in the mould making. In some cases neither the all-over smooth surface nor the invisible mould joints have in fact been achieved.

Brackets and lanterns

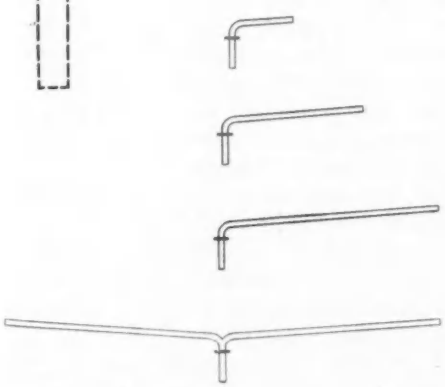
So far we have been concerned only with the shaft of the *Trifoil*. While this remains a constant feature of the design, it will be seen from the accompanying illustrations that the design as a whole depends very much on the relation between the shaft, bracket and lantern, the last two being variables. The manner in which the brackets spring from the shaft is logical and frank and the near horizontal angle simplifies changes in outreach without altering the design of the bracket. When curved brackets are used each outreach must be of a different radius. Besides making standardisation impossible this also gives an unhappy visual effect when brackets of varying outreach are used in juxtaposition. The effect produced by the choice of lantern can, however, completely destroy the relationship between these component parts. The mercury lantern in the New Cromwell Road, 1, or the sodium versions in the Great North Way, 6, are logical terminations of the brackets and seem to click into place to complete the final integration of the design. The fluorescent boxes, on the other hand, at Ampthill, 7, hang from the shaft without conviction, making the whole design top heavy and crude.

Unfortunately the industry tends to be divided into



4 Elevations and cross-sections of the *Trifoil* column. B shows how the thickness of the control box. The acceptance by local authorities of smaller control gear would allow columns to be much slimmer. The central channel, shown in A and C, is formed naturally as a result of the spinning process of manufacture. Three reinforcing rods are used.

5 Four variations of bracket. The near horizontal angle allows brackets of different outreach to be used in juxtaposition without altering the basic design.



6 and **7** The *Trifoil* was designed for open trunk roads and looks well on a highway such as the Great North Way out of London, **6**. When used in a town such as Ampthill, **7**, the same column appears out of scale and obtrusive, since it towers above the eaves of the old buildings. The effect is made worse by the addition of the large fluorescent lantern which was not designed for this column, making it look top heavy and clumsy. In such a situation a slimmer column also of modern design, probably of metal, with a 20-ft instead of a 25-ft mounting height and with a very much smaller lantern could have been chosen. Columns of this type have already been successfully used elsewhere.

6

7

8

9

8 and **9** The use of metal straps to attach road signs of various types is particularly unhappy on this column with its unusual section. A special fitting, **9**, has been proposed by the designer and it is to be hoped that the demand by local authorities will enable this fitting to be incorporated in later models.

those firms that make lanterns, but not columns, and those that make columns but not lanterns. When local authorities go out to tender, they usually go to the lantern specialists which submit prices for the *complete* installation including the column. Since the lantern specialist is generally far more concerned with selling his lantern than with selling other manufacturers' columns he will tend to quote on the basis of the cheapest column available. As in the case of the control gear, the solution would seem ultimately to lie in the design and manufacture of integrated ranges of columns and lanterns that can be competitive in price.

Lamp-posts are frequently regarded as ideal supports for a multitude of signs and notices of all sorts, yet the manner in which these signs are attached is seldom given serious thought. The designer of the *Trifoil* has made special provision for this requirement, **9**, and we must therefore ask why the crude metal straps, **8**, soon resulting in ugly rust streaks down the column, continue to be used by local government and other authorities.

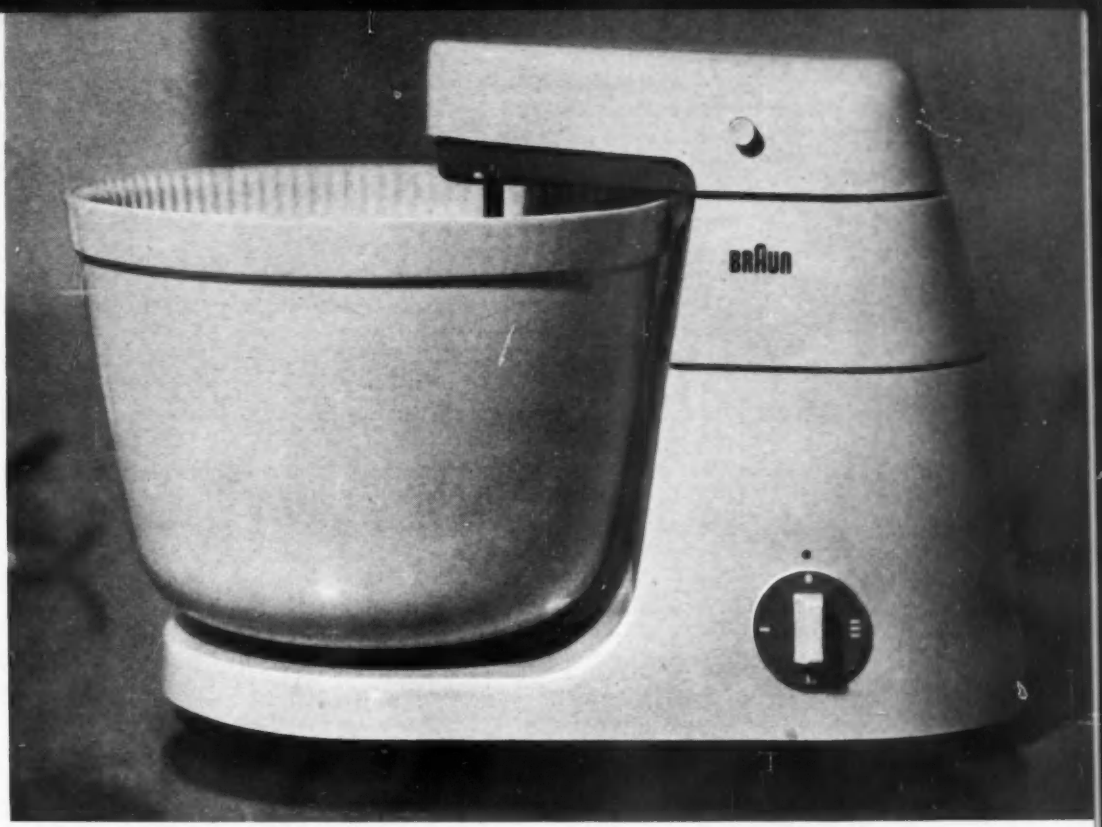
Appearance – in isolation and on site

The success of the *Trifoil* as a unit depends on the handling of the form as a whole and on the detailing. The shape has been determined by considerations of use, manufacture, erection and servicing. Above and below the control box the shaft tapers so that the whole column appears to stand poised. The unusual cross section was evolved from a simple triangular section with rounded corners (sharp arrises would be damaged in manufacture, erection and use). Subsequently each side was dished to reduce weight and provide definite break lines for the mould joints. This has the effect of creating vertical highlights and shadows so that the spectator's eye is directed up the length of the column and is distracted from its circumference making the column appear slimmer. But this unique section gives way to a cylinder towards the top giving an impression of a slight thickening – at the point where slimness is most desirable. In the same way the parallel section at the base to allow for different mounting heights is disturbing in the few cases where this is visible.

But the final judgment can never be made in isolation for lighting columns occur in repetitive sequence and relate to the width of the road, to the character of the street and its buildings. The width of the pavement which decides the distance between the column and the building is a most important factor in this relationship.

In fulfilling its function as a support for a light source a column can be unobtrusive, so that it retires into the background, or it can in itself be distinguished and make a positive contribution to the furnishing of the street. To decide which approach to adopt, ideally the designer should know the location for which he is designing. Unfortunately such an ideal is seldom realised and the designer must therefore work with a general idea in mind of the type of road on which his column will be used. In reality he will often find, for example, that a column he has designed for open trunk roads is erected in a medieval town and that a lantern is attached for which the column was never intended.

It is not easy to suggest a solution to this problem. But the responsibility for the total appearance of the streets rests with local authorities. The public may rightly object to certain installations but condemn them for the wrong reasons – it may appreciate that they are wrong but not understand *why* they are wrong. The local authority's lighting engineer often knows why they are wrong but, because of administrative and technical complications, is not able to do very much about it. In these circumstances a drastic reappraisal of purchasing methods and local regulations is needed so that the requirements of individual locations can be satisfied by the most appropriate designs available. Where the siting requirements cannot be met satisfactorily by existing designs local authorities should be urged to investigate alternative methods – bracket supports from walls, or the use of columns of special heights. These may not provide perfect solutions where main roads run through old towns, but they would help to reduce many of the anomalies that exist today. Ultimately, in failing to cater for the expansion of modern transport with by-passes and motorways, it is the road system itself which is the real nigger in the wood pile.



1 *Germany* Few kitchen mixers show the degree of integration and clear undemonstrative shaping that are evident in this design. It will perform most of the mixing, grinding and slicing operations required. MAKER *Max Braun. DM245.*

European trade

Powered domestic appliances

overseas review

ONE OF THE MORE OBVIOUS effects of European integration will be to increase the ratio of the size of the market to the cost of production. Clearly this will be of most benefit to those industries in which production costs are high, so that the domestic appliance industry is more alive than most to the possibilities that the formation of a European Free Trade Area would offer.

Assuming a substantial increase in trade, the effects of the larger market might be felt in one of three directions. A firm making gas cookers for example, which would expect under existing conditions to recoup the cost of tooling-up for a new model in three years, might with the larger market achieve the same position in two or perhaps one. This means that the manufacturer either can reduce the price of the model and keep it in production for the current three to five years; or he can introduce new models more frequently, say every two years; or he can offer a more advanced design, requiring more expensive tooling and materials, at current prices, but with a less frequent model change. While it is likely that most firms will endeavour to try all these approaches, or some form of compromise, the last two particularly will demand a greater emphasis on design, and on long range planning, than has been generally evident in Europe.

Direct comparisons with the American appliance industry would be misleading, though the existence there of a large home market has produced a pattern of expansion in the domestic appliance industry which suggests possible lines of development in Europe. The buying potential of the American home market led some years ago to a vast growth of the appliance industry. Once this potential was satisfied American manufacturers turned to other methods of selling their produce – first by an emphasis on styling and later through the planned obsolescence of these styles to

DESIGN correspondents:
Denmark: Ibi Trier Mørch
France: Roger J. Cario
Germany: Heinrich Koenig
Italy: Letizia Ponti
Sweden: Eva Ralf

stimulate an artificial demand. Some leading American designers and manufacturers have now realised, however, that this approach has provided them with only a temporary solution to their market saturation problems. They are turning increasingly to technical developments and to more thorough investigations of how these technical advances can best serve the needs of people. New types of markets are also being tried so that the customer is less the housewife in the shop and more the architect or builder who can plan the house around elaborate group appliances sold as packaged units. This process of evolution has been partly influenced by shopping and living habits so that we may envisage further changes that will come from pre-cooked and pre-packed foods.

In Europe the domestic appliance industries have a long way to go before reaching this stage. Markets are still far from saturation point and the growth of the appliance industries must inevitably await the gradual rise in living standards. Manufacturers may be expected therefore to concentrate first on increasing sales by skimming off the price margins, and competition on this score is likely to be keen. Eventually however the demand for more advanced forms of mechanisation in the home will increase and British firms would be shortsighted if they did not anticipate this demand with long term programmes of development and research. Here it is to be hoped that the American lesson will be learnt and that the danger of relying on styling obsolescence will be appreciated.

The traditional differences in cooking methods, the types of food eaten and the way home life is organised within the individual countries of the FTA, are not the least of the problems that must be faced by exporting manufacturers. Inevitably these differences will limit the full exploitation of quantity production methods, particularly in the early stages, and demand an intimate knowledge of the markets to be served. The organisation of efficient servicing is also a matter that requires imaginative planning for reputations can be quickly lost through lack of attention to this problem.

Of more immediate concern, however, are the electrical standards that differ from country to country. Although the International Commission on Rules for the Approval of Electrical Equipment (CEE) has done much since its formation after the war to co-ordinate the national regulations of member countries, there is still a long way to go. The Scandinavian countries are particularly strict with their standards and some British firms complain that their rigid enforcement has been used to obstruct the import of domestic equipment.

In general it is those countries that possess the most highly developed engineering industries that are likely to reap the greatest benefit from European integration. Britain therefore occupies a strong position, with Western Germany as her chief competitor. A recent survey of the British electrical industry carried out by *The Financial Times* stated that in 1956 Western Germany produced 750,000 refrigerators compared with Britain's 307,000, though Germany's exports amounted only to about the same as ours. Yet in the design of domestic appliances Britain has less reason to be apprehensive than in many other industries. The feeling for style that is evident in many Scandinavian and Italian designs for the craft based industries seems to have little equivalent in these engineering products. Surprisingly enough France produces a number of gas appliances with a quality of design that suggests she may become a serious competitor in the future. The illustrations on these pages show, however, that Germany will remain the most formidable obstacle for a considerable time to come. In the long run it is the manufacturer who invests most in research and design who will reap the greatest rewards. The American cooker shown on page 57 suggests that scope still exists to improve the design of British appliances.

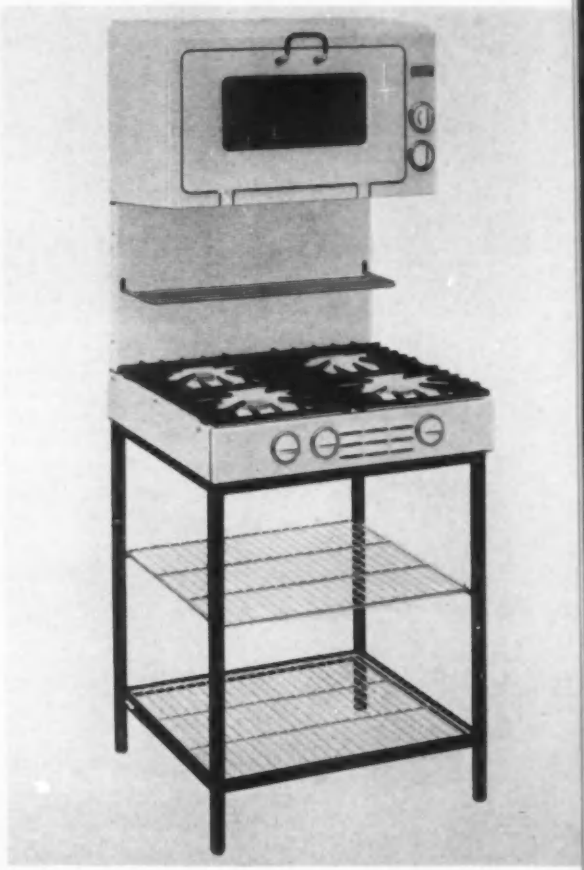
2

3

2 *Germany* The restrained design of this electric cooker is typical of this firm's products. It has one high speed cooking plate and can be supplied with an infra-red grill. MAKER *AEG. DM291.*

3 *Germany* This is a compact and mobile version of the normal cylinder type of vacuum cleaner. An unusual feature is the use of PVC for the pipes making the machine light to use. MAKER *Philips GMBH. DM298.*

4 *Germany* Combination units of this type are becoming increasingly popular on the Continent. This example has a twin enamelled sink unit connected to the cooker (gas or electric available) with a drawer unit incorporating a pull out shelf. MAKER *Wamsler G M B H. DM787.*

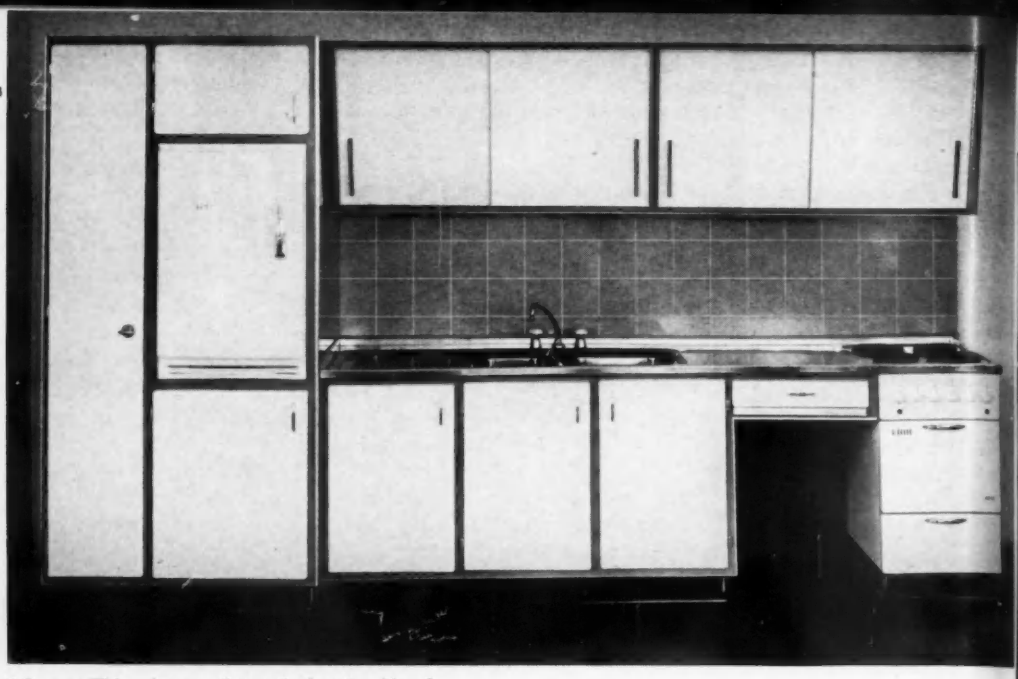


5 *Italy* This arrangement of storage compartments, high oven and cooking top with condensation hood provides a neat solution to the Continental desire to group appliances together into compact units. MAKER *Zanussi Industries L250,000.*

6 *Denmark* Gas cooker with eye level oven. The cooking top has been designed to give maximum flexibility in installation. It can be built into kitchen storage units, have its own cabinet, be supported on brackets or on an open frame unit as shown here. DESIGNERS *Erik Herløw and Tormod Olesen.* MAKER *A/S Ernst Voss Fabrik. Dkr* 835.

7 *Germany* Production of spin dryers in Germany has increased enormously in the past few years reaching 750,000 units in 1957. This example weighs 17 lb, is portable, and is claimed to hold 22 lb of wet laundry which it will spin dry in two to three minutes. MAKER *Herzog & Langen G M B H. DM195.*

8

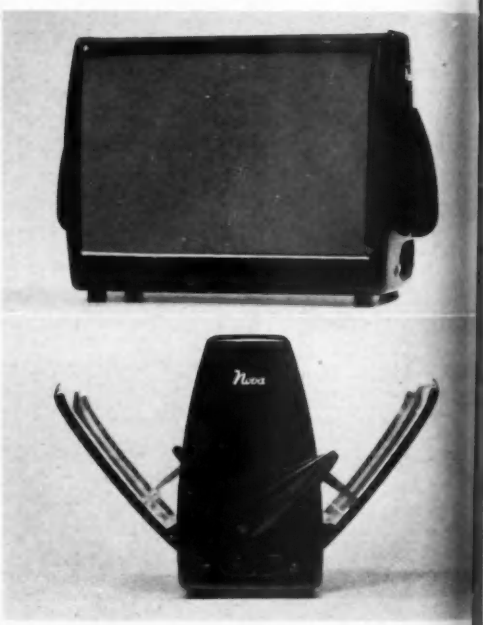


8 *Germany* This unit comes close to the American idea of a packaged kitchen. Cooker, double sink unit and storage space are combined beneath a single stainless steel top. On the left is a storage unit containing an eye level refrigerator. MAKER *AEG* *DM* 2,950.

9 *Germany* Washing/drying machine. Soaking, washing, rinsing and tumbler drying are carried out automatically and the machine has a capacity of 5 kg of dry clothes. MAKER *AEG*. *DM* 2,280.

9

10



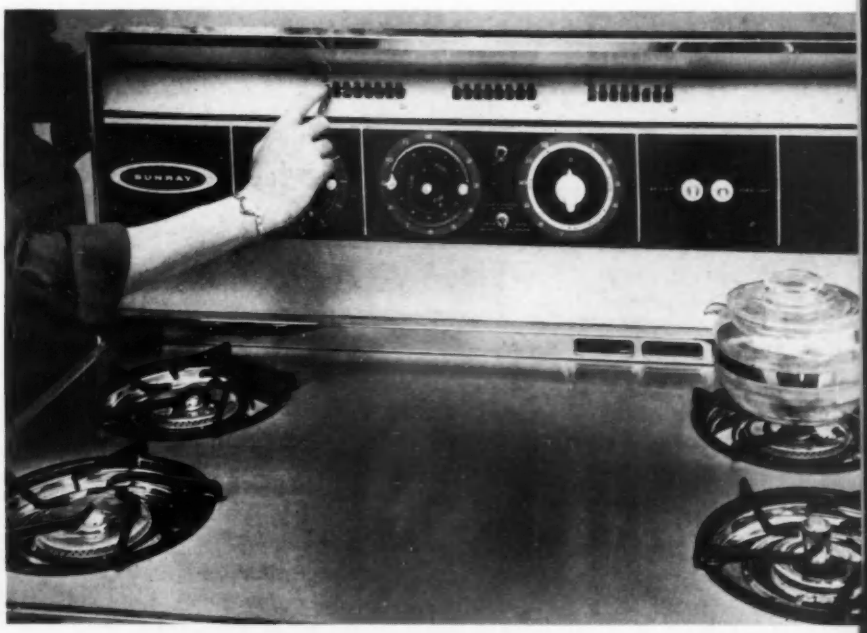
10 *Belgium* This semi-automatic electric toaster is one of a wide range of small matching appliances recently introduced by this firm. The toaster was this year awarded the *Signe d'Or*, a Belgian prize for distinctive design. MAKER *Nova S A*. 495 *BF*.

11

12

11 *France* The use of a lid (which doubles as a splash back) to cover up the burners of a cooker when not in use is a common practice in France and Germany. In this gas cooker, the lid has been extended to conceal completely the burner taps. DESIGNER *T. Meunier*. MAKER *Ets Thermor*.

12 *Germany* This solid fuel boiler, incorporating a hotplate for cooking and a warm drawer, is part of a matching range of appliances including both gas and electric cookers. An interesting feature of this range is the number of additional items that can be purchased afterwards. To the electric cooker, for example, can be added an infra-red grill, a mechanical spit timer, and electrically heated drawer. MAKER *Frankische Eisenwerke A G. DM* 317.



Remote control: a new trend?

USA Push buttons for gas

As suggested in the article on page 53, the formation of a European Free Trade Area could well intensify the search for more advanced technical solutions to the problems of mechanisation in the home. This cooker from America shows one possible line of development. Claimed to be the first gas cooker to be operated by push buttons, it also incorporates on its fourth burner a solenoid operated valve allowing a constant temperature to be maintained in the cooking vessel. There is also a clock timer for this burner and the oven, and a radio remote control (available as an accessory) to enable burners to be turned on or off from about 50 ft away. The control panel shows how the often coarse treatments in the past have given way to more precise and refined layouts. The introduction of this cooker suggests that the traditional supremacy of the electric appliance industry in America is being challenged by the gas industry through a more adventurous approach to design. DESIGNER *Read Viemeister*. MAKER *Sunray Stove Co.*

USA Air transport interiors

The article on pages 35–8 criticises the lack of attention that is shown by the Brit. aircraft industry to the basic design of passenger accommodation in air transport. While BOAC has taken the lead in an attempt to improve British design in this sphere, it can do little beyond choosing colour schemes and finishes, for the shapes and forms of the interior spaces have already been settled by the manufacturer. This would be no disadvantage if the shapes and forms in themselves were good – but as the article points out the industry has eschewed the help it could have received from industrial designers, with the result that the basic forms to which BOAC's new schemes are at present being applied lack the sense of style which is so urgently needed.

The American manufacturing and operating industries have been fully conscious of this need for some time and on these pages we show two new interiors that demonstrate the type of approach we feel is essential if British aircraft are to compete successfully in home and foreign markets for the custom of increasingly design conscious travellers.

1 Lockheed *Electra*, America's first turbo-prop airliner due for service this autumn.

Lockheed Electra

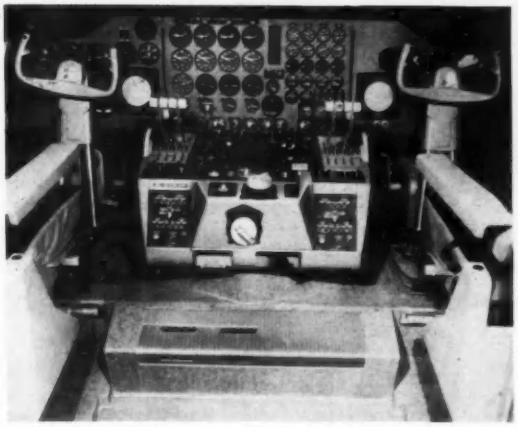
The *Electra* is a short to medium range turbo-prop aircraft designed primarily for domestic routes in the USA and abroad. Though still not in operational service, it will be the first American-made turbo-prop aircraft, the lack of which has contributed so much to the success of the *Viscount* in American markets. Recognising the growing importance of passenger appeal, the manufacturer has considered it necessary to devote considerable attention to the detailed design of the interior, the work being prepared in conjunction with Lockheed engineers by Henry Dreyfuss, the New York consultant, who also designed interiors for the same company's *Super Constellation* aircraft.

From the earliest stage the conception of the interior has been determined by the desire to break up the tube effect into a series of more intimately arranged compartments. Dreyfuss had already used this arrangement in the *Constellation*, but in one of the four interior schemes for the *Electra* the idea has been further developed to create in each compartment a lounge-like atmosphere with arm chairs, tables and reading lamps. Provision has been made for three of these compartments in addition to a semi-circular lounge aft, two compartments with standard seating and a small cabin adjacent to the galley.

Perhaps the most interesting development is the replacement of the normal longitudinal luggage racks by transverse racks designed as an integral part of the partitions – an arrangement which, it is claimed, eases considerably the passengers' access to the seating and at the same time helps to overcome the sense of cramped enclosure which is a common feature of aircraft cabins. As can be seen from the accompanying illustrations of the full sized mock-up, the introduction of the lamp and table unit creates a focal point within each compartment that gives a logical unity to the design.

The interior as a whole is an interesting example of the way the aircraft manufacturer can set the pace in design, and experiment with new concepts without direct reference to the operator, and thus encourage

2



2 Henry Dreyfuss' influence can be clearly seen in the cockpit by Lockheed's staff designers Jack Davis and Robert Robillard. Unusual attention has been given here to the arrangement of dials and to the appearance of such items as the central consol, the control columns and the seats. The normal black crackle finish to control panels has been replaced by a neutral grey and visually distracting elements have been minimised. Seats are reclinable and movable in all directions.

3

3 One of the non-reclining three-seat passenger units. The double cushions at the back with the cut-away base are the result of ergonomic research, but also have a precise, uncluttered appearance.

4 One of the compartments photographed in the full size mock-up. The twin non-reclining seats each side of the lamp and table unit are slightly angled to allow for more intimate grouping of passengers. The lamp provides a centre of interest in the compartment and the table accommodates literature and emergency oxygen. The transverse luggage racks allow extra headroom within the compartment.

the airline to look beyond its immediate operational requirements. But for airlines which require reclining seats for longer flights, three other schemes of a more conventional character are also offered.

Whether or not the compartment idea is an acceptable solution to an airline's operational problems is not in itself of immediate concern here. Of more direct importance is the manner in which the scheme has been carried out. The precise detailing that is noticeable in the treatment of the various elements which go together to make the complete interior has a sense of style that is the unmistakable trademark of the industrial designer. Yet this sense of style should not be thought of as mere styling. Styling is the application of currently fashionable shapes for their own sake with little direct reference to function. In the *Electra* interiors, style and function are closely related.

This dual approach can be seen particularly in the seating design. Henry Dreyfuss co-operated with Dr Janet Traveil, Cornell Medical College, to produce seats of maximum comfort for the greatest variety of physical types. Since *Electras* will be used largely on short and medium haul journeys fixed seating is included as well as the normal reclining types. By careful ergonomic design in which provision is made for a wide range of posture, it is claimed that these fixed seats give a standard of comfort equal to that of reclining seats. The result is a considerable gain in structural simplicity and lightness.

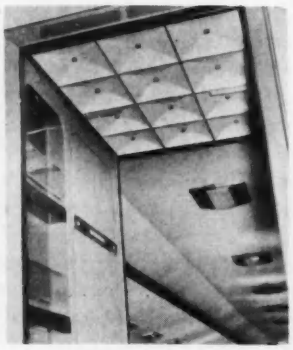
5 Vickers *Viscount* 812, 15 of which are on order for Continental Airlines, USA.

Continental Viscount

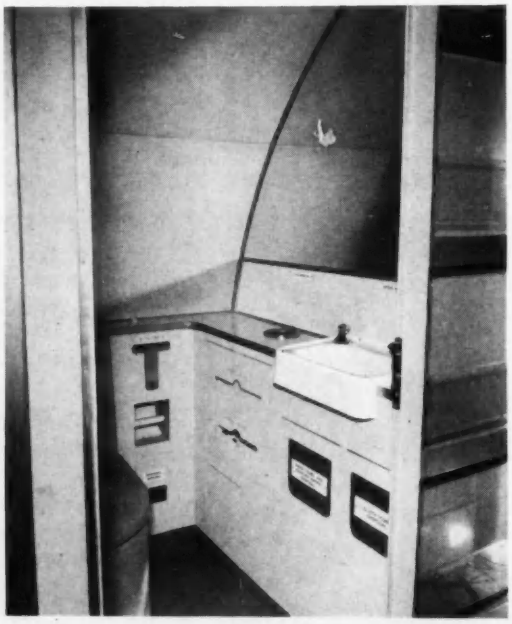
Vickers has followed a practice with its *Viscount* aircraft that is fundamentally different from that of American and other British manufacturers. Instead of presenting an aircraft with a basic interior in which the airline can apply its own particular livery, Vickers has been content to leave the airline to appoint its own designer to create the complete interior. This approach has been successful in the American market since it has allowed complete freedom for the individual operator and has avoided the type of compromise solution that exists in BOAC's new scheme for the *Comet* 4 and the *Britannia*. On the other hand it inevitably increases the cost and complication of production if the number of purchasing airlines is large and each has a different requirement. It also results in difficulties among the smaller airlines who may not wish to go to the trouble and expense of designing the complete interior. In the long run it can never be a completely satisfactory substitute for the ideal situation whereby the industrial designer is employed by the manufacturer.

The scheme designed by Charles Butler Associates for Continental Airlines, *Viscount* 812 aircraft, demonstrates how a successful interior depends more on the basic design of the passenger space, luggage racks, bulkheads, toilets, galley, lighting fittings, service units, etc, than on the choice of applied colour and finishes. The colour schemes themselves have been chosen to suit the route and have a rich brassiness that would be unlikely to satisfy a quieter British taste. But the forms are calm and restful with a clarity that results from an understanding of proportion, and a simplicity that derives from an integrated relationship of parts.

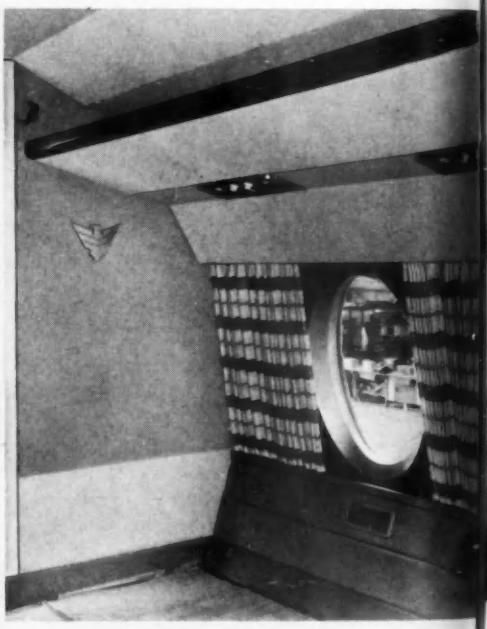
6



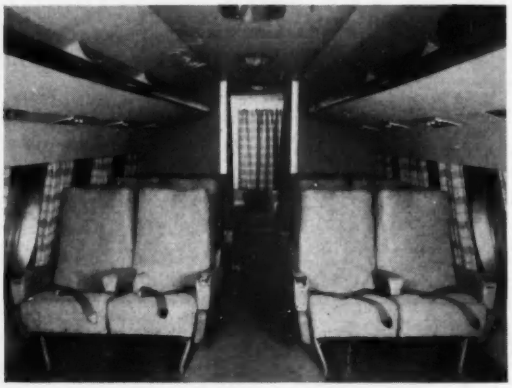
7



8



9



6 The ceiling treatment defines the small lobby space separating the forward compartment from the main cabin seen in the background. On the left is a lavatory door and next to it a recessed magazine rack. The ceiling lights incorporate air conditioning extraction grilles.

7 One of the lavatories. In such a small compartment the clean uncluttered design of the cabinets and large fitted mirror help to create a feeling of spaciousness. Compare with the *Comet* 4 lavatory on page 36.

8 The shape of the cabin space contributes much to the overall effect. Here the angles of the lining panels and the treatment of the windows make a positive and simple statement that does not confuse the eye.

9 General view of the main cabin in a Continental *Viscount* 812.

USA: shopping developments

THE AMERICAN ATTITUDE to selling appears to be a basically simple one, the principle being to get as many people as possible to part with as many dollars as possible, and if this can be achieved with the minimum inconvenience and discomfort to the customer so much the better. Examples of the principle in action can be seen in any of the shopping centres which have been developing, particularly since the war, on the outskirts of American cities.

There are signs that a similar development may take place in this country, on a more limited scale of course. We have already accepted the supermarket which is the first step towards centralised shopping. Recently the designer, Hulme Chadwick, returned from a tour of the USA, where, on a Ford Foundation, English Speaking Union travel grant, he studied the whole subject of shopping centres from coast to coast. If our attitude in this country to retailing practice follows the American pattern, and in broad terms Mr Chadwick thinks it will, it is possible that their 30-odd years of experience will be of practical value to us.

The shopping centre resulted from experiments to supply the needs of the suburban population developing either round the perimeters of existing cities or in new communities such as Levittown.

An English landscape? The Northland Regional Shopping Centre, Detroit, designed by Victor Gruen and Associates.

The centres themselves are designed on the basis of the size, location and social level of the communities they serve. The smallest are the *Neighbourhood* centres, comprising 10 to 15 separate shops on a site of 5 to 10 acres, which generally sell goods for immediate family needs – food, drugs, sundries, etc. They require the support of at least 1,000 families. Next are the *Community* centres, which, in addition to the goods stocked by the neighbourhood centres, sell clothes and hardware. They comprise 20 to 40 separate shops on a 10 to 25-acre site and require the support of over 5,000 families. The largest centres are the *Regional*, which usually have a department store as a nucleus and stock goods in all categories. (The department store is often one of a combine, which means the suburban shopper has the same choice of goods as the town shopper). They can include 50 to 100 shops and supply 100,000 to 250,000 people. Regional centres with their extensive parking facilities cater for 'one-stop' shopping, ie, one stop of the car to buy everything you need.

If any single cause can be assigned to development of the shopping centre it is the automobile, which, to quote from a technical bulletin on shopping centres published by the Urban Land Institute, Washington, DC, "makes possible a redistribution of expanded commercial and industrial activity over a greater area surrounding the metropolitan core."

It is clear that shopping centres on the scale mentioned earlier would not be serious propositions in this country at the moment or in the immediate future. However, if they have a future here at all it will depend upon a substantial increase in the number of cars per head of population and upon advances in home organisation and equipment, perhaps similar to those outlined in the appliance house article (DESIGN May 1958). Assuming that these developments will in time come about, and there is no reason to suppose they will not, what advantages could the shopping centre offer? The obvious answer is that practically all the customers' shopping problems can be solved in one place on one visit. Also in large suburban developments the centre would have the secondary, but none the less important function as a community centre in the social sense.

The designer's role

In spite of these advantages there are also disadvantages. One of the most pressing problems in this country at the moment, is the preservation of marginal land and the checking of suburban development. Closely connected with this is the necessity to ensure that the various categories of landscape are sufficiently differentiated in character.

The solution to these problems may not be helped by the shopping centre with its dependence upon more cars and larger communities. However, numerous changes have already taken place in retailing practice and it is reasonable to assume that many more will take place in the future. At the same time changes in social patterns and behaviour are also taking place. If shopping centres are to develop they can either be useful additions to the community, socially and aesthetically, or they can be monstrous subtopian islands set in a sea of cars. The more information that is available on the subject is insurance against the latter happening, which was the purpose of Mr Chadwick's visit. That shopping centres can be built as real social amenities is illustrated by the Northland centre outside Detroit, designed by Victor Gruen and Associates. If they are to fulfil the same role in this country it is up to designers, developers and architects to see that they do.

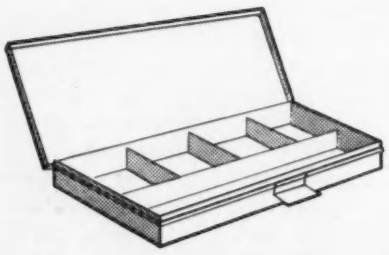
Colours of the most dazzling brilliance...

and a new masking fluid for retouchers!

If you want gouache colours vastly superior to any ordinary gouache colours or poster colours, then ask for **Winsor & Newton's Designers' Colours.** Choose Designers' Colours for their dazzling brilliance, fine texture, exceptionally smooth flow, great opacity,* and high degree of permanence.* Equally successful with brush, air brush, ruling or lettering pen. There are 68 wonderful colours in the complete range.

No.1 Designers' Water Colour Box

A strongly-made tin box in grey "hammered" finish. Holds 12 "C" size tubes and has ample space for brushes. Size: 9¾ ins. x 4½ ins. x ⅞ ins. Box only, without colours, price 12s. 6d. (U.K. only).



Winsor & Newton's Art Masking Fluid

When applied by brush or pen enables parts of a photograph, drawing or painting to be protected from subsequent freely-applied colour. The masking film can be peeled off or gently rubbed away, without damaging the surface. Ideal for air-brush work. In 2 fl. oz. bottles, price 2s. 6d. (U.K. only).

* *Leaflet No. 115 giving detailed characteristics of each colour, and Tint Card No. 70 showing specimen washes of the actual colours, supplied free on request.*

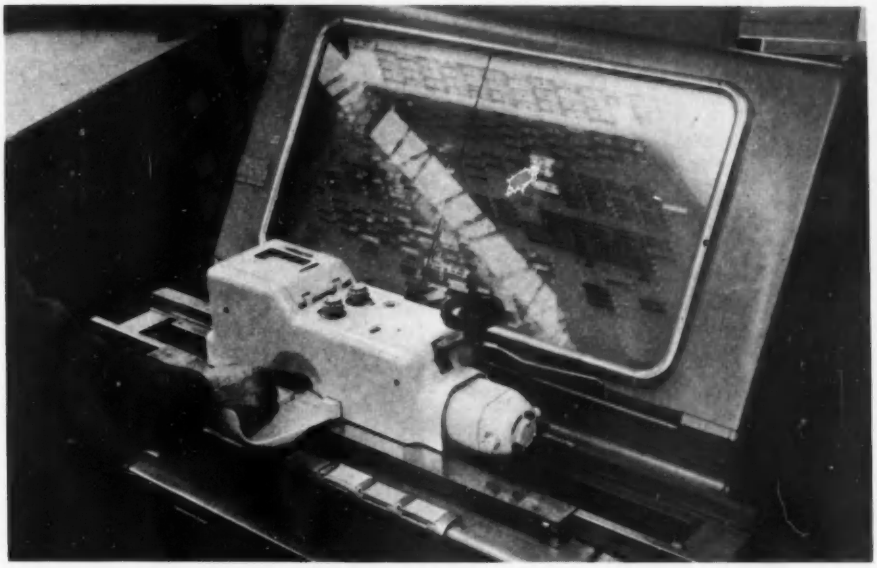
TRADE MARK

Winsor & Newton

WINSOR & NEWTON LTD., WEALDSTONE, HARROW, MIDDLESEX
Also at New York and Sydney, N.S.W.

Miscellany

1



Automatic issue

A mechanised booking office for the electric line platforms has recently been installed at Euston station. The office is equipped with a multiprinter machine, 1, which prints tickets at the time of issue and therefore obviates the need for the usual rows of ticket racks. In addition to printing and dating, the machine records details for accounting purposes. It is intended to install 10 larger machines in the main line booking halls at Euston.

Mobile finance

Barclay's Bank Ltd has recently opened a first-floor escalator branch in the High Street, Birmingham. One of the features of the new branch is a number of mobile tills, 4, designed by Roy Gazzard, architectural representative of Barclay's, who is responsible for the design of the branch, in collaboration with A. B. Measures, the bank's manager and L. A. Husbands of Sankey-Sheldon Ltd.

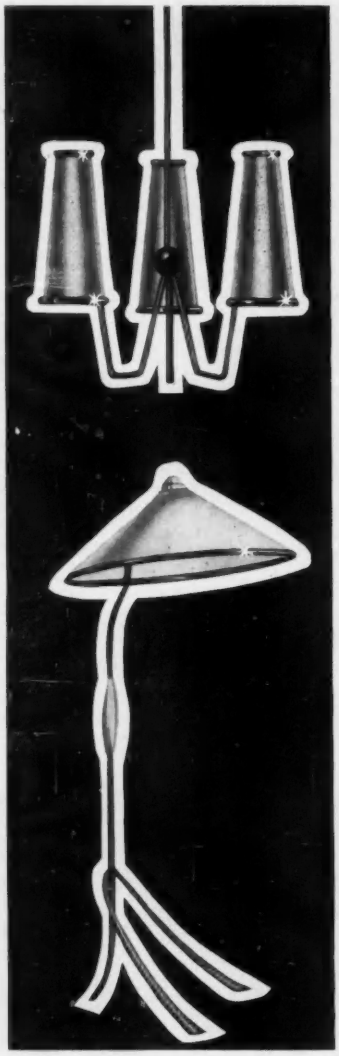
The main advantage of the mobile till, which fits under the counter-top, is that it can be wheeled into the vault at the end of the day's business without the necessity of emptying the individual drawers. The drawers themselves, 3, have been simplified and have a distinct operational advantage over the older type, 2.

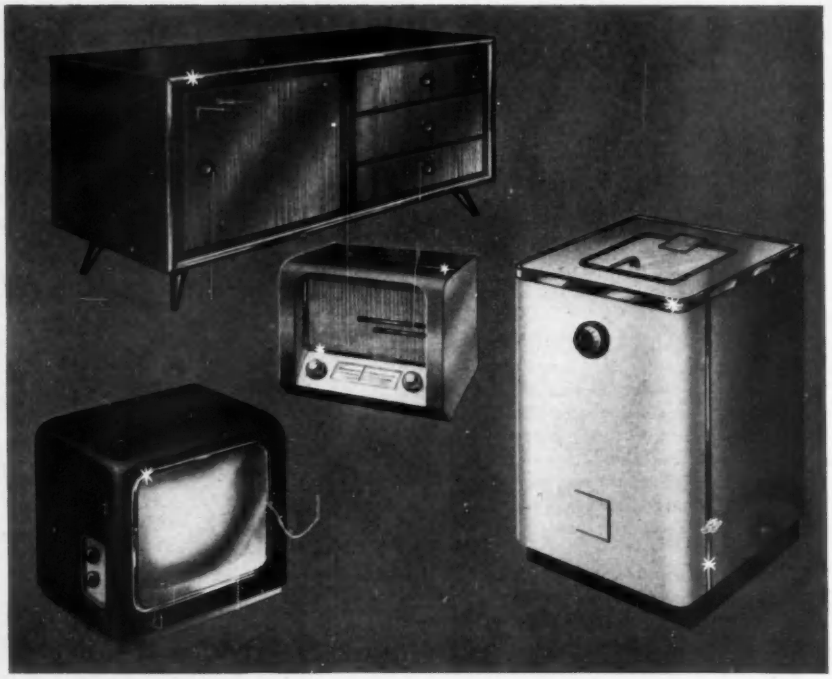
Mobile till assemblies are coming into use at the moment in Barclay's bank premises throughout the Midlands, and are being installed in branches in East and West Africa.

2

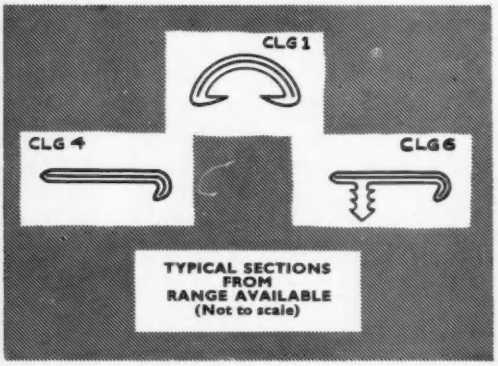
3

4





A new trimming for your products



Write now for further information

that's

CLAYLASTIC

the plastic embellishing strip that gives a low-in-cost durable finish in
CHROME
BRASS
COPPER
or any metallic finish required

Manufactured by

HOWARD CLAYTON-WRIGHT LTD.

WELLESBOURNE - WARWICKSHIRE

Telephone: Wellesbourne 316/7/8

Telegrams: Clatonrite Wellesbourne

NEWS

PEOPLE

One of the pace-setters

On page 39 of this issue Wyndham Goodden discusses the third book of Palladio wallpapers which has recently been presented. One of the dominant handwritings in the Palladio collections is that of Audrey Levy, who this year as well as last had a wallpaper design selected as one of the CoID *Designs of the Year*.

Audrey Levy is primarily a designer of two-dimensional patterns – wallpaper, textiles – although she has made several excursions into interior design which she enjoys enormously, and recently has embarked on pottery decoration for T. G. Green & Co Ltd. Her interest in interior design is symptomatic of her approach to design in general. For instance, when designing she always tries to visualise the interior in which her wallpapers and prints might be used. Coupled with this is her preference for working as one of a team, with architects or other designers on a specific job. Architecture, she feels, must be vital if design in other spheres is to be vital.

Asked whether she ever designed with particular markets in mind, she said that she found this almost impossible to do. However when a collection of designs

Audrey Levy

had been produced it was possible then to decide where each one could be placed.

Miss Levy thought that while design in this country was continually improving, and she acknowledged the CoID's part in this, the 'climate' was not yet suitable, as it seems to be in Scandinavia, to sustain a robust tradition of modern design. However, she thought that a 'climate' would eventually come about and said that she hoped her work was making some contribution to this end.

Audrey Levy studied textile design at the Royal College of Art, after previously attending Nottingham College of Art and Crafts. When she left the Royal College in 1951 she worked as a consultant for three years designing dress prints for wholesale dress firms. But since then she has worked in a free lance capacity, producing fabrics and wallpapers, notably for Palladio.

American visit

Peter E. M. Sharp, a regular contributor to DESIGN on electrical engineering subjects, has been awarded a Ford Foundation, English Speaking Union travel grant to the USA.

During his two-month stay there, which will begin in the spring of 1959, Mr Sharp hopes to visit many of the leading electrical companies. He also intends to see as many industrial design schools and designers as he can, on which he will report for DESIGN magazine.

Mr Sharp is personal assistant to A. H. Young, joint managing director of Troughton & Young Ltd, electrical engineers and contractors. He is a qualified telecommunications engineer, and has designed all

Peter E. M. Sharp

kinds of electrical equipment including television and radio sets as well as show rooms and exhibition displays. From 1949–51 he was industrial officer for the telecommunications industry at the CoID, and subsequently an agent for Troughton & Young (Lighting) Ltd in the Far East.

REPORTS & CONFERENCES

Courses for retailers

The CoID, in co-operation with the Glass Manufacturers' Federation is holding a non-residential course on glass for retailers and wholesalers from October 13–17 at 19 Portland Place, W1. Among the speakers will be L. T. Sawney, president of the Glass Manufacturers' Federation and Hugh Wakefield, assistant keeper of circulation, Victoria & Albert Museum. A visit to the factory of James Powell & Sons (Whitefriars) Ltd has also been arranged.

Residential courses on furniture and on pottery will be held at Grantley Hall, Ripon, Yorks from February 9–13 and the Wedgwood Memorial College, Barleston, Staffs, from April 6–10, 1959 respectively.

Annual meeting

The Modular Society Ltd will hold its annual general meeting at 6 pm, November 3 at the Building Centre, Store Street, WC1. The meeting will be followed by an exhibition of members' work.

The Summer issue of the *Modular Quarterly* includes a report on five years' work by the society. It outlines the essentials of modular co-ordination and includes a section on three rules for modular assembly. From the Modular Society Ltd, 22 Buckingham Street, WC2, 5s.

Engineering design

The CoID in collaboration with the Birmingham Exchange and Engineering Centre is holding a one-day conference in Birmingham on November 12 with the theme *Industrial Design and the Engineering Industries*. The chairman will be Whitney Straight, vice-chairman of Rolls Royce Ltd and a member of the CoID.

The Rt Hon Lord Mills, Minister of Power, will give the opening address on the national importance of industrial design, to an invited audience of senior executives of Midland engineering companies.

The purpose of the conference is to study the role of industrial design in relation to the engineering industries; to discuss what steps should be taken to improve the form and function of engineering products; to consider how best to make use of the services of trained industrial designers; to encourage an appreciation of appearance design among those already employed in the engineering trades, and to examine the problem of training industrial designers for the engineering industries.

Interior guidance

A series of talks on aspects of interior design is being held at the Odeon Cinema, Tottenham Court Road, on the Tuesday, Wednesday and Thursday of the two successive weeks which commenced on September 30. The talks are part of the Tottenham Court Road Association's festival, and the subjects for discussion are *Furniture in the home*, *Décor of the home* and *Workshop of the home*. The opening talk on *Changing Tastes in Furniture* was given on September 30 by Paul Reilly, deputy director, CoID, and will be repeated on October 7 in the second week.

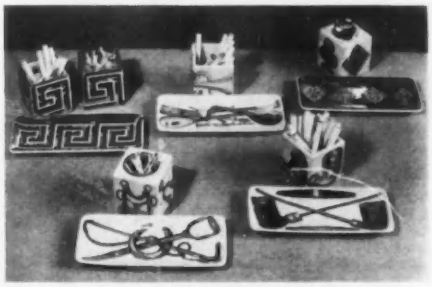
Tickets are obtainable free from the cinema or from the furniture stores in Tottenham Court Road.

Appearance matters

The AEI group of companies is holding a weekend course from October 24–26 for people in the group associated with appearance design. The course will be organised by the industrial design sub-committee of the AEI engineering committee. Speakers at the course will include Lord Chandos, Sir Gordon Russell, director, CoID and F. C. Ashford, reader in industrial design (engineering) at the Royal College of Art.

EXHIBITIONS

Italian chic



A ceramic smoking set with various decorations on show until October 4 at the Tea Centre in an exhibition of the work of Piero Fornasetti, the Italian designer. The exhibition, which has been organised in conjunction with Peter Jones, Marguerite D'Arcy and Liberty & Co Ltd, includes a wide variety of designs from trompe l'oeil *screens to paper weights.*

Motor show

The annual *Motor Show*, organised by the Society of Motor Manufacturers and Traders, will be held at Earls Court this year from October 22 to November 1, 10 am to 9 pm daily. The official opening ceremony at 12 noon, October 22, will be performed by the Rt Hon R. A. Butler, the Home Secretary.

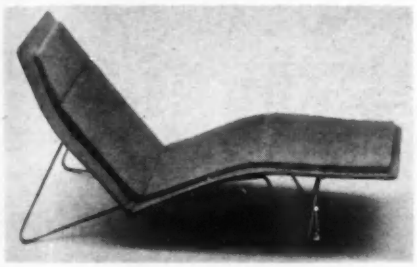
continued on page 67

Fabric luxury

An exhibition called *Lurex in contract furnishings*, designed by Miller & Tritton, has been on show at Lurex House, 48 Charles Street, London W1 for the past four months. The aim of the exhibition was to demonstrate the uses of Lurex in "gracious living" and it was divided into sections devoted to hotels (including fabrics developed for the Continental Hilton Hotel, Mexico City), automobiles, aircraft and liners.

A room of their own

From October 10–28 the Royal College of Art is holding an exhibition called *A room of our own*, at the Tea Centre. The exhibition, which was conceived two years ago, is in the form of a furnished drawing room and dining room with a small terrace. The rooms were designed by the students of the school of interior design under the supervision of Lady Casson. All the furniture and fittings, which include a built-in wall unit, a swivelling television set and a glass fibre folding



chaise-longue (ABOVE), were specially designed by students in the various industrial design schools.

An important feature of the exhibition is the co-operation of different branches of industry with the college. Most of the items on show have been made up as prototypes by industry and in some cases designs are now in general production or soon will be.

MISCELLANEOUS

Centenary prizes

Over 3,000 designs were submitted in the £1,750 *Sanderson Centenary Competition* for wallpaper and furnishing fabrics. The entries were judged by Sir Colin Anderson, Wyndham Goodden, Humphrey Spender, Lady Casson and Paul Reilly. The winners are, for wallpaper, Gordon Crook, Peggy Angus, Alan Parkin, Dennis Limbrick, Mary Nilsson, and for furnishing fabrics, Alan Parkin, Mary Yonge, Robert Dodd, Mary Harper and Victor Knell.

Patients rewarded

The Oxford Regional Hospital Board, in co-operation with its various management committees, is experimenting with the interior design and equipment of the new hospitals in its area. With the help of the CoID and the Record of Designers, the Regional Board, together with the Northampton Hospital Management Committee, decided to invite a design consultant to advise on the furnishing and equipping of the new out-patients department at Northampton General Hospital, which is one of the schemes at present being carried out by the board. Subsequently Paul Gell was invited by the Regional Board to undertake supervision of the Northampton scheme. Mr Gell is working in collaboration with the architects, the Regional Board, the Hospital Management Committee and the staff who will eventually use the new department. It is expected to be completed early in the New Year.

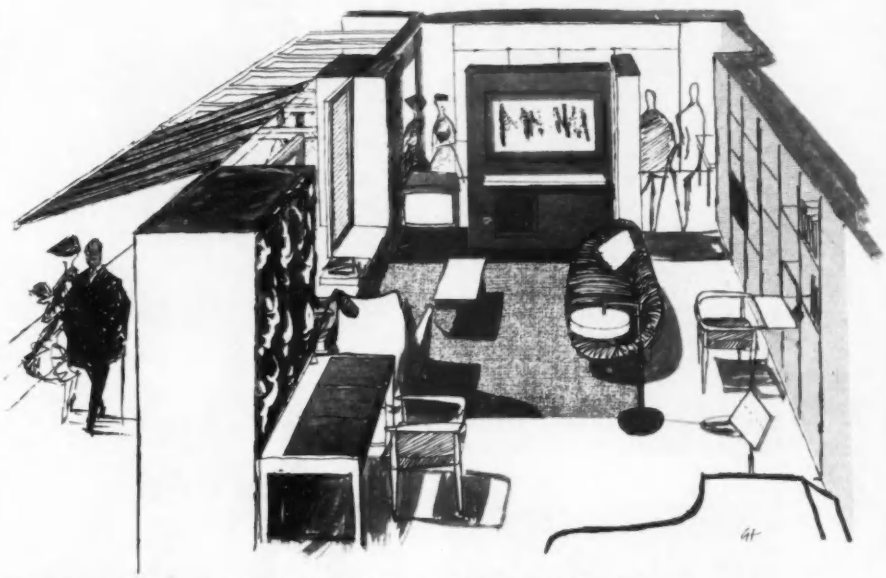
Future in aluminium

Two years ago Alcoa, the Aluminum Company of America, organised a *Forecast* programme "to commission outstanding designs of tomorrow in Aluminium". So far 10 such designs have been commissioned and include an hexagonal stacking table by Isamu Noguchi, a shelving unit by Alexander Girard and the *Solar Toy* by Charles Eames. The latest design, which was displayed at the international design congress at Aspen recently, is a *Kaleidoscreen*, an outdoor space divider and sun screen, designed by Herbert Bayer.

Screened

An interesting idea for improved curtain lining material is the fabric *Milium*. A cotton sateen is treated with a thin coating of aluminium, which by its reflection of heat rays helps to insulate room temperatures from excessive cold or heat outside. The fabric helps to prevent curtains from fading; it drapes well and can be dry cleaned successfully. Apart from the possibility of its use domestically, *Milium* would seem to have distinct possibilities as a curtain lining in hotels and other public buildings.

Milium is to be manufactured in Great Britain under licence from the American firm Deering, Milliken & Co.



A general view of the Royal College of Art Exhibition, A room of our own, *at the Tea Centre. Drawing by George Freeman. See* A room of their own.

LETTERS *to the Editor*

Cars: appearance and performance

On page 22 of this issue references are made to the comments of car manufacturers on a recent article Ergonomics versus styling in cars (DESIGN July pages 29–35). *Further extracts from letters on this subject are published below.*

Reaction to safety

SIR: Most of the points raised in your article are extremely important and can be criticised on many cars in production today.

It may be of interest to you that we designed, in 1945, a car with clover leaf type seating, which has been incorporated in the Cornell-Liberty Safety Car (DESIGN July pages 56–57). Our market research department, however, showed us that there would be a big customer reaction to this type of seating and the design was therefore changed for this reason.

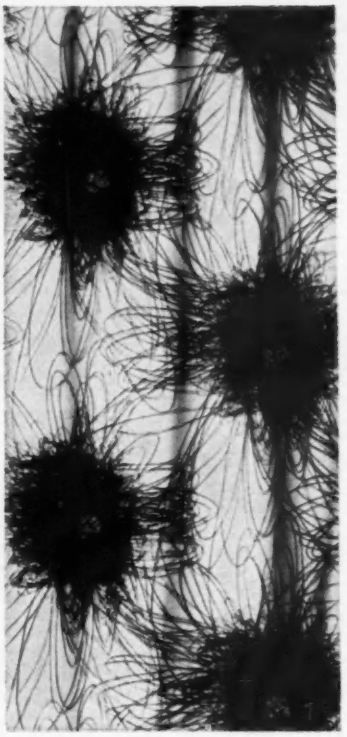
Your criticism regarding projection on the door pillar of the Standard *Pennant* has now been effectively overcome by fitting a clothes guard. Without trying to excuse ourselves regarding this point, there was a very good reason why the projecting portion was fitted. After the car was in production a very serious defect arose with the lock and it was necessary to install a lock which was already fully tooled and which could be fitted to our models without interrupting the flow of production; unfortunately this lock carried the projection complained of. As we have already stated, the clothes guard now fitted overcomes the complaint.

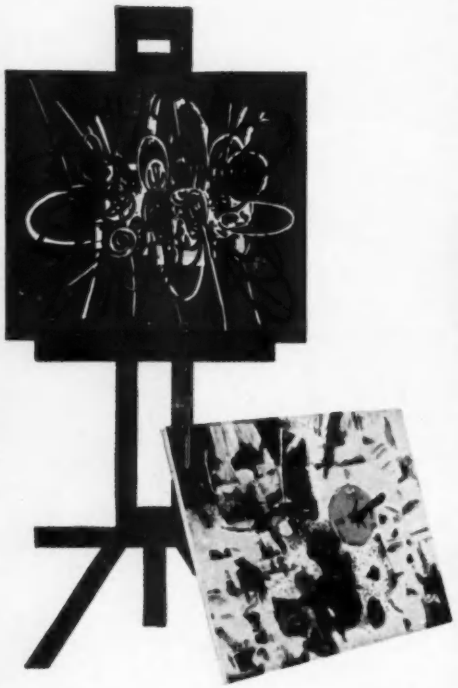
The position of the handbrake lever, I think you will agree, is difficult on cars fitted with front bench seats. With bucket seats it is a simple matter for the

continued on page 69

H. 346/1

H. 344/1

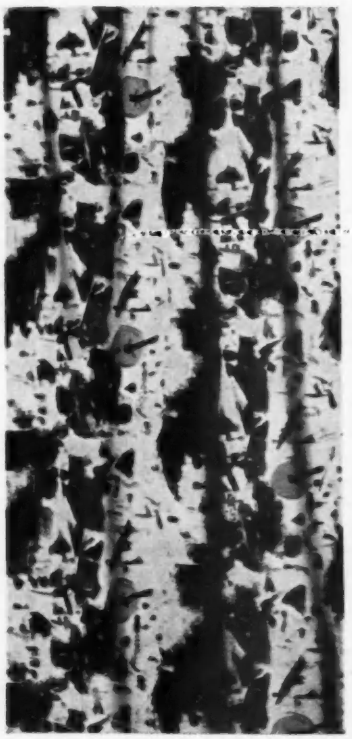




H. 348/1

Spazialismo!

Paintings from the modern
Italian school translated from
easel to silk screen.
Illustrated here are reproductions
from originals by
Morandi and Crippa.
Again Sanderson set a precedent,
and invite you to see these
exclusive new fabrics at any
of the showroom addresses below.



H. 345/2

SANDERSON FABRICS

ARTHUR SANDERSON & SONS LTD.
BERNERS STREET, LONDON, W.1.

GLASGOW: 5-7 NEWTON TERRACE · EDINBURGH: 7 QUEEN STREET · LEEDS: 30 LOWER BASINGHALL STREET · MANCHESTER: 8 KING STREET
BIRMINGHAM: 258 CORPORATION ST. · SOUTHAMPTON: 65 THE AVENUE · EXETER: ST. STEPHEN'S HOUSE, HIGH ST. · BRISTOL: 4-6 THE HORSEFAIR

LETTERS

handbrake to be placed between the seats and behind the change speed lever and this we already do on our 8 hp, 10 hp and *Pennant* models. In the case of the *Vanguard* and *Ensign*, however, these cars can be fitted with either a steering column gear-change or a floor gear-change, and for production reasons it is necessary for the handbrake to be positioned so that it will not interfere with the floor gear-change lever; the handbrake was therefore placed on the opposite side of the steering column to the gear-change lever.

We fully agree with your remarks regarding the relative positions of the accelerator and foot brake pedals. The transference of the foot from the accelerator to foot brake is very much easier if the brake is at least level with the accelerator when they are not depressed. Unfortunately, with the introduction of the hydraulic brakes a stroke of between five and six inches is required for the foot brake and unless the length of the car is increased to give the same relative seating space it inevitably means that the foot brake stands a good deal higher than the accelerator pedal. Unfortunately, extra length means extra cost, but you may be assured that this problem is being studied very carefully.

A. E. BALLARD
Chief Body Engineer
The Standard Motor Co Ltd
Coventry

Vision or trapped hands?

SIR: You may be interested to know that our engineering department has for some time been following with interest the development of ergonomics and has latterly been taking the journal of the society in question.

No one would dispute the importance of driving position, vision and disposition of controls in relation to road safety. However, it seems to me unfortunate that in an article specifically written to emphasise these matters your contributors should have dismissed the panoramic windscreen as "a styling gimmick" while at the same time discovering a danger in closing the door which is certainly not supported by practical experience in the hands of the public. In this and other ways the article leaves me with the impression that your contributors have had only limited experience of the cars which they criticise. Thus, the very real advantages of the panoramic windscreen are appreciated by several days' driving experience in a way impossible to parallel by sitting in the car in a showroom. I also think that some of the supposed disadvantages associated with this design are found to be non-existent on closer acquaintance.

PHILIP W. COPELIN
Managing Director
Vauxhall Motors Ltd
Luton

Customer appeal

SIR: The contributors to the article have tended to ignore some aspects of the problem which must be kept uppermost in a designer's mind. It is of no use making the safest car in the world if the public will not buy it. A car must have customer appeal, and this includes, but goes far beyond, appearance and styling. It must first of all appeal to the customer's pocket so that he feels he is getting good value for money, and this means the designer must keep a very close watch on the economics of the design – weighing this consideration against that and making the best possible compromise from the customer's point of view. The car must both look right and feel right to the average owner. Moreover, the designer must keep in mind the demands of overseas markets, whose requirements may vary very considerably from each other and from our home demands. The car buying public is not strongly 'safety minded' in its choice of a car, which is probably a good thing. People regard the car as a means of pleasure or transport, and if they regarded it as a lethal weapon they would probably, in the end, decide not to buy a car at all. This attitude of mind explains why safety harness has not taken on, even in America, and why such a car as the Cornell-Liberty Safety Car would never be a commercial success in this generation.

We find it hard to believe, for instance, that a customer would welcome a row of knobs all different in shape in order to make it easier for him to identify them by feel. It is much more important to have those control knobs, such as lights and wiper, which are required when on the move placed high up and well away from starter and choke so that they can be quickly reached without taking the eyes off the road. Again, in the matter of accelerator and brake pedal the accelerator is the control in use 75 per cent of the time, and it is therefore most important to obtain a comfortable position for the foot on this pedal, which is not always compatible with having it higher than the brake for engineering or economic reasons.

L. P. HALL
Engineering Division
The Nuffield Organisation
Cowley, Oxford

Design for panic

SIR: I feel that your contributors are too much concerned with the normal and premeditated operation of the minor controls of motor cars. Surely, it is more important to render unlikely the possibly dangerous maloperation of choke, starter, etc, under 'panic' conditions than to provide a 'logical' arrangement.

Most motorists will be familiar with the occasions when an engine stalls in traffic or when a little use of the choke is necessary to bring a cold engine back to responsive life. In these circumstances it is rarely that one is able to look at the controls and I maintain that any hurried movement should result in either the intended effect or a mistake of little consequence, such as the windscreen wipers starting to work. It should not result in the starter being operated with the engine running, as might happen if the starter button were alongside the choke knob.

J. K. VOSE
44 Washway Road
Sale, Cheshire

Safety at a price

SIR: It may well be that the question of passenger convenience and safety has only received serious attention since the last war, but speaking for the Rootes Group it is certainly true to say that we have always given these aspects of design the utmost consideration in our post-war programme.

Furthermore, it must be recognised that each manufacturer is waging a continuous struggle against rising costs, and in many cases the means of increasing passenger convenience is associated with higher costs so that if implemented places him in a less competitive position on this score.

We do not agree that the front wrap-round screen is entirely a styling gimmick, as the further back the front pillars are positioned consistent with satisfactory entry, the wider the field of vision. We believe that of screen wrap-round will increase, probably on the lines of the Cornell-Liberty car. But again it must be appreciated that a cost increase will certainly follow, as well as a considerable number of problems associated with assembling the glass to the car.

While not disagreeing with the remarks on controls, an ideal arrangement is not always possible to achieve on a small car due to the difficulty of running the cables in the restricted space both under the facia and bonnet.

Providing the controls are clearly marked it is not felt necessary to design the knobs with different shapes, as apart from detracting from the appearance, this policy departs from the rationalisation programme which helps to keep a rein on costs.

Moreover, if clearly marked the owner quickly accustoms himself to the layout, and the operation of the controls calls for little distraction of attention from the road.

E. S. WHITE
Chief Stylist
Rootes Group, Coventry

A deterrent?

SIR: Over the years I have met many cases in which the construction of a motor vehicle and its design have apparently contributed to an accident. The blind spot of a front pillar drew the wrath of a well known firm of motor manufacturers when I called attention to it; a too easily opened door with hinges at the back (an elderly Riley) has led to death. But I was unable to achieve much enthusiasm for the internal padding, etc of the American Cornell-Liberty Safety Car recently illustrated since the knowledge of danger may encourage the driver to avoid risks.

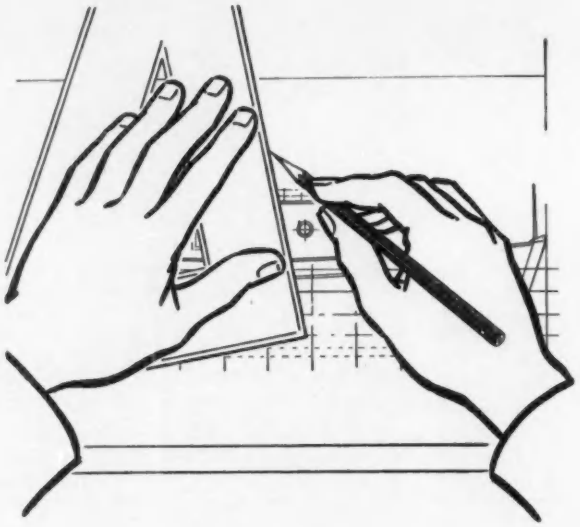
SIR BENTLEY PURCHASE
H.M. Coroner for Northern District
County of London
St Pancras Coroner's Court, NW1

New alphabet

SIR: Under the heading *Competitions* in your May issue you very kindly announced the £500 award now being offered by the Public Trustee for a new British Alphabet under the terms of Bernard Shaw's Will. Unfortunately you gave it the sub-heading *Alphabet or Alfabet*. I say unfortunately because it inevitably suggested to your readers that the problem was one of minor adjustments within the Roman alphabet rather than the major one of designing a brand new alphabet.

There are some fascinatingly interesting problems of design which are posed the moment Bernard Shaw's challenge is understood. To understand it has proved very difficult. Possibly the best method for your readers to approach the question is for them to imagine that the present European races had maintained the Roman numeral system and that only Roman numerals were used and understood. In other words, that Arabic numerals had not been invented. In such a situation the problem of designing new symbols for a new numerical system would be approached with an entirely fresh mind, and clearly any sub-heading 'VIII or IIX' to the announcement of such a competition would clearly work against that freshness of approach

continued on page 71



"To a chap like me –
and I'm proud of my work – my pencil's
my living.
The pencils I use have to stand up to fast
hard work, their grading's got to
be absolutely spot on – not almost
or nearly but bang on the dot every
time.
The leads must hold their points
and flow smoothly throughout a long line –
no crumbling or 'clinkers' mark you! –
and if I erase a line it must go cleanly –
there's no 'furrow' left in my paper
so you won't find ghost lines in prints
made off my drawings. As a matter of
fact you can tell from a print when it is
my drawing – the print's always first class."

"What pencils **do** I use?"

"Venus drawing pencils of course, the ones
with the crackle finish! – how else
do you think I keep up my high standard?"

VENUS
DRAWING
PENCILS

✻ VENUS *Drawing Pencils are made in 17 accurate grades from 9H to 6B.*

THE VENUS PENCIL CO., LTD., LOWER CLAPTON ROAD, LONDON, E.5.

⋆ An interesting
⋆ floating
⋆ Sideboard

In Australian Blackwood and ebony, installed in a Directors' dining room, the centre portion is fitted with trays, having direct access to the servery. This dining room forms part of the new executive offices of The Times Furnishing Co. Ltd., completely designed and executed by Ian Henderson Ltd.

Ian Henderson Ltd. are organised to carry out furnishing schemes to the requirements of architects and interior designers, or to submit new designs.

Specialists in complete office and domestic interiors, including panelling, fitments, fine carpets and beautiful textiles.

Ian Henderson Ltd

184 SLOANE STREET · LONDON S.W.1
(200 yards from Knightsbridge on the left)
Telephone: BELgravia 3271-2

upon which all good designs must be based.

The challenge is also better understood when it is recognised that the Roman upper-case letters A, B, etc, have been supplemented already by two further Roman alphabets – the Roman lower-case a, b, and the Roman cursive.

Shaw believed that reading can be improved and that vast economies may be achieved in the process of covering paper with legible marks and in all the consequent movement and storage. A saving of $10 million a *day* is attainable.

The closing date for entries for the new British alphabet competition is January 1, 1959. Particulars of the competition may be obtained from The Public Trustee, Kingsway, London, WC2 – a stamped (4½d) addressed envelope should be enclosed.

I. J. PITMAN
39 Parker St, WC2

BOOKS

Typographica 14
Edited by Herbert Spencer, Lund Humphries, 7s 6d
As a designer I cannot pick up a copy of this journal without a feeling of anticipated excitement at the thought of the illustrations and text that appear in every issue. *Typographica* does not set out to be a journal packed with facts, but by very careful selection the editor has set an exceptionally high standard of material illustrated; perhaps the text is not always so stimulating but for those who 'see' with their eyes there is much to behold.

Typographica 14 reviews the work of the Gaberbocchus Press, which will long be remembered for its edition of Bertrand Russell's *The Good Citizens' Alphabet*. Walter Plata sets out some first class work from two German presses, the Grillen-Presse, a private press in Hamburg and the Eggebrecht-Presse, a small commercial printing and publicity office in Mainz.

There is a review of *Experimenta Typografica*, by W. J. H. B. Sandberg, who is now director of the Stedelijk Museum, Amsterdam. *Old fashioned types and new fangled typography* is a study by Alan Fern in the revival of nineteenth-century exotic type faces; the author expresses a lukewarm admiration for what has been revived and those who have made display typography in our country so virile today. PETER HATCH

Aluminium in building
E. I. Brimelow, Macdonald & Co (Publishers) Ltd, £2 2s
This volume is a most valuable addition to the growing library of books dealing specifically with the major groups of modern building materials and techniques.

Considering that aluminium and aluminium alloys have developed to their present stage in only about a 100 years, progress is remarkable. Its potential as a building material has, within this period, as a result of increasing control of industrial production, become equally as important as steel.

One of the greatest contributions which the author makes is to describe clearly the performance potential of aluminium in regard to its building use. Though the author is not an architect, the chapter dealing with the architectural applications shows insight, and it is regrettable that a great many designers who in one way or another make use of aluminium in their designs, do so without proper knowledge either of the material or its architectural applications.

It is unfortunate, as aluminium has almost doubled in price during the last five years, that the increasing use to which it could be put in the building industry is badly hampered.

On the technical use of aluminium, recent experience in regard to roofing would suggest that BS CP3 : 1952 needs to be revised.

DENIS A. BIRCHETT

Going to the mountain
A mobile display unit built by Kelvin & Hughes (Marine) Ltd for a sales tour of Eastern Europe and the Common Market countries. The unit demonstrates marine radar equipment. A second unit built by Kelvin & Hughes (Industrial) Ltd will make a similar tour demonstrating among other things high frequency recording apparatus and ultrasonic non-destructive testing equipment.

Careers encyclopaedia
G. H. Chaffe and P. J. Edwards, Cleaver Hume, 15s
The second edition of the *Careers Encyclopaedia* lists some 216 trades and professions, as allied as "kennel work" and "fur trade", as new as "atomic energy" and as old as "agriculture".

Design in one form or another is quite well and factually served, (except that The Design Centre is of course open on *Saturdays* not Sundays) but suffers from the fact that references to the various careers in industrial design are scattered throughout the book. This is not so with other professions – the various fields of engineering occupy 80 consecutive pages, and there seems no good reason why commercial design, dress design, furniture design, industrial design and interior design should not be similarly grouped. Presumably any boy or girl interested in design would like to explore all the possibilities, and as the training is broadly similar (ie three to four years at an art school) considerable duplication would be avoided. In the section dealing with commercial art and industrial design there seems an unnecessary emphasis on the various examination requirements, particularly as (apart from teaching) the qualification of NDD is little known and lightly regarded in industry. On the other hand, there is little of factual interest in the short paragraph on prospects, in strong contrast to similar sections in other parts of the book, where there are usually tables of salaries.

These comments are not so much a criticism of the book as of the information available on career in industrial design. This factual lack is an obvious deterrent to the quality and quantity of recruitment which the profession needs.

This is the British glass industry
Glass Manufacturers' Association, 19 Portland Place, London W1
A short description of the processes used in the glass industry today. It is well presented, and illustrated. It covers many aspects of manufacture, including the raw material of glass, glass melting and forming, domestic glass, optical glass, etc.

Addendum
DESIGN May page 34: in the section devoted to The British Welding Research Association in the article on *House Style*, the general editor and joint designer of the association's pamphlets is A. G. Thompson.

Design's index
The index to DESIGN (DESIGN 1958, Volume II, January–June) is now published and will be sent only to those readers who request it from the Circulation Manager, 28 Haymarket, SW1. Copies of DESIGN for 1958 can be bound in two volumes at 17s 6d each volume. Copies should be sent direct to Benham and Co Ltd, 12 Culver Street, Colchester, Essex. Readers having copies bound need not order a separate index as this is included in the bound volumes.

MANUFACTURERS *in this issue*

AEI Lamp & Lighting Co Ltd, Meltor Rd, Leicester
Brookes & Adams Ltd, Barr St, Hockley, Birmingham 19
de Havilland Aircraft Co Ltd, Hatfield, Herts
Fleetway Manufacturing Co Ltd, 11 St Andrew St, EC4
Fordigraph Ltd, Ofrex House, Stephen St, W1
H. Frost & Co Ltd, Walsall, Staffs
General Electric Co Ltd, Magnet House, Kingsway, WC2
Greaves & Thomas Ltd, Clapton, E5
S. Greenman Ltd, 280–282 Old St, EC1
Heal & Son Ltd, 196 Tottenham Court Rd, W1
S. Hille & Co Ltd, 134a St Albans Rd, Watford, Herts
Holoplast Ltd, New Hythe, Near Maidstone, Kent
Jones' Sewing Machine Co Ltd, Guide Bridge, Near Manchester
Kodak Ltd, Wealdstone, Harrow, Middlesex
Lightbown Aspinall Branch of The Wall Paper Manufacturers Ltd, Hayfield Mills, Bredbury, Near Stockport
L M Furniture Ltd, 15 St John's Rd, Wallingford, Berks
Microcell Ltd, Craven House, 121 Kingsway, WC2
Ernest Race Ltd, 22 Union Rd, SW4
Guy Rogers Ltd, Relaxwell Works, Edwards Lane, Speke, Liverpool 19
Sankey-Sheldon Ltd, 46 Cannon St, EC4
J. Stead & Co Ltd, Manor Works, Cricket Inn Rd, Sheffield 2
The Merchant Adventurers Ltd, 43 Portland Rd, W11
Thos Webb & Sons, Amblecote, Stourbridge
A. Younger Ltd, Crown Wharf, Monier Rd, Bow, E3

DESIGNERS *in this issue*

John Barnes, FSIA; Gerald Benney, DesRCA; J. Beresford-Evans, MSIA; Paul Boissevain, DipArch, MSIA; Ronald E. Brookes, MSIA; Barbara Brown, DesRCA; Lucienne Day, ARCA, FSIA; Robin Day, ARCA, FSIA; Gordon Dent; George Fejér, MSIA; S. Frosh; Gaby Schreiber, FSIA, and Associates; Roy Gazzard; Paul Gell; John J. Herbert, MSIA; Jack Howe, FRIBA, FSIA; Margaret Leischner, HonDesRCA, FSIA; Audrey Levy, DesRCA, MSIA; F. R. Littlewood; Tom Lupton, MA, AADipl, MSIA; John Morton, AADipl, ARIBA, MSIA; Roger Nicholson, ARCA; Doreen Norgrove; Ernest Race, RDI, FSIA; Herbert Spencer, FSIA; S. Walker; Ward & Austin; Dennis Young, ARCA, MSIA.

Classified advertisements

Rates: 1s 3d per word (minimum, 20s). Box numbers, 1s extra

Copy: Last date for copy is 10th of month preceding date of issue

RECORD OF DESIGNERS

MANUFACTURERS *requiring the services of designers, whether for staff positions or in a consultant capacity are invited to apply to the Record of Designers, CoID, London, or to the CoID, Scottish Committee, 46 West George Street, Glasgow C2. They can obtain a short list of designers suitable to their particular purposes, which should be explained in some detail. This service is free to British manufacturers and incurs no obligation.*

SITUATIONS VACANT

AN IMPORTANT POSITION for a designer is now open with a company manufacturing low to medium priced bedroom furniture. The position will carry a substantial salary also the prospects of a Directorship. The successful applicant must, however, be prepared to devote his whole time, conduct own market research and be conversant with all modern trends. Applications will be treated in the strictest confidence. Write Box 319, DESIGN, 28 Haymarket, London SW1.

MORRIS OF GLASGOW require for service in East Africa, a Retail Manager, Machine Shop Foreman, Factory Manager, Assembly Shop Foreman and a Furniture Designer, for service with their associate company in Nairobi. A knowledge of East African conditions and Swahili language would be an advantage.

CITY OF BIRMINGHAM EDUCATION COMMITTEE
COLLEGE OF ART AND CRAFTS
Principal: Meredith W. Hawes, ARCA, ARWS, NRD.
Applications are invited for the post of LECTURER in the College of Art and Crafts, School of Furniture. Candidates should have had suitable industrial and teaching experience and be qualified to teach Design, Detailing and Practical Work to advanced industrial and NDD students. Salary: Burnham (Further Education) Scale for Lecturers – Men £1,200 × £30 to £1,350. Duties to commence as soon as possible and in any case not later than 1st January, 1959. Forms of application and further particulars may be obtained from the Principal, College of Art and Crafts, Margaret Street, Birmingham 3 (s.a.e.). *Closing date:* 4th October, 1958. E. L. Russell, Chief Education Officer.

CITY OF BIRMINGHAM EDUCATION COMMITTEE
COLLEGE OF ART AND CRAFTS
Principal: Meredith W. Hawes, ARCA, ARWS, NRD.
A full-time Senior Lecturer in INTERIOR DESIGN is required in the School of Industrial Design of the College, to train students up to the Ministry of Education's National Diploma in Design. Experience as a practising designer essential. Teaching experience would be an advantage. To commence duty as soon as possible, but in any case not later than 1st January, 1959. Salary in accordance with Burnham (Further Education) Scale of Salaries for Senior Lecturers; Men: £1,350 × £50 – £1,550; Women: £1,080 × £40 – £1,240 plus equal pay increments. Further particulars and application forms may be obtained from the Principal, College of Art and Crafts, Margaret St., Birmingham 3 (s.a.e.). *Closing date*: 14th October, 1958. E. L. Russell, Chief Education Officer.

DESIGNER is required by The General Electric Co Ltd, Magnet House, Kingsway, London WC2, for work in the field of lighting fittings design. This is an interesting and responsible post, with good prospects, for senior designer with sound previous experience. Application in writing should be addressed to the Staff Manager (Ref. FD).

THE GENERAL ELECTRIC CO LTD, require a Designer with experience of lay-out and typography for work with the preparation of lighting fittings catalogues. Some copy writing experience would be an advantage. Apply to the Staff Manager, GEC, Magnet House, Kingsway, London WC2, giving full details of training and experience.

DESIGNERS capable of producing good visuals for point of sale and other three-dimensional forms of advertising, and with sufficient knowledge of techniques to be able to translate into practical terms. Reply in writing to Mr J. Haley, head of design group, Marler Haley Studios Limited, 1 North Road, London N7.

CHIEF DESIGNER required by leading manufacturers of Plastics Housewares and Toilet Goods, to succeed present Designer in about a year's time. The successful candidate would be expected to commence duties as soon as possible. Salary according to experience. This position offers scope and good prospects to the right person, and is specially attractive to a woman with the right qualifications. Box 318, DESIGN, 28 Haymarket, London SW1.

SITUATIONS WANTED

YOUNG LADY seeks position with Interior and Furniture Designer. Experienced but seeks wider scope. Box 317, DESIGN, 28 Haymarket, London SW1.

FURNITURE DESIGNER (23) NDD First Class Final City and Guilds. Seeks employment or private commissions. Box 320, DESIGN, 28 Haymarket, SW1.

EXHIBITION DESIGNER, 27, nine years experience in all aspects of exhibition design and administration seeks full-time position with architect/designer or a design group within an industrial organisation working on exhibition or showroom projects. Box 321, DESIGN, 28 Haymarket, SW1.

ARTIST/DESIGNER, MSTD, MSIA, Specialist in Packaging, Publicity Design, Typography, desires full or part-time post, preferably in Scotland. Box 322, DESIGN, 28 Haymarket, London SW1.

GRAPHIC DESIGNER, 37, seeks change. Varied experience, bias towards display. At present in Sales Promotion department of large company. Three months notice necessary. Box 323, DESIGN, 28 Haymarket, London SW1.

COMMISSIONS & DESIGNS WANTED

INTENDING EXHIBITORS at Overseas Fairs should contact DAVIES TURNER & CO LTD for free guidance. Specialists in packing and shipping Exhibits and Stands. Phone SLOane 3455 or write to 4 Lower Belgrave Street, London SW1, quoting Ref USX 680.

RALPH SALTIEL, furniture designer invites your enquiries for the designing and/or making of special furniture and fitments for shop, office, hotel or home. Original designs and craftsmanship to the highest modern standards. 523 Finchley Road, NW3. Hampstead 9427. Works PRIMrose 0207.

APPLETON AND VAN HEERDEN have opened a contemporary furniture showroom and workshop at 6 Newburgh Street, W1 (REG. 1409) and will be pleased to supply you either from stock or to individual specification.

IDEAS AND DESIGNS, decorative and graphic, colour schemes, layout. Diana Behr, 16 Brim Hill, Hampstead Garden Suburb, N2. SPEedwell 1560.

TYPOGRAPHIC DESIGNER experienced in exhibition and press typography offers free-lance services. Flat Production for exhibition; re-styling, design and production of house journals, stationery, brochures, etc. Box 283, DESIGN, 28 Haymarket, SW1.

PRINTING AND ADVERTISING

PERFECTION IN PRINT. If you require display work which requires extra care in production, faithful reproduction of an expensive design, on first class work which you will be proud to display, whether it is screen printing, letterpress or litho you can trust it to TRAPINEX LIMITED, 176–188 Acre Lane, Brixton, SW2. Counter and window displays and all forms of window publicity.

KINGS NORTON PRESS (1947) LTD, Colour Printers, have the most modern equipment to produce first class printed material coupled with a design service of outstanding merit. Factory – Kings Norton, Birmingham 30. Telephone: KINGs Norton 2262. London Office – Blackfriars House, New Bridge Street, London EC4. Telephone: CITY 6289.

CHRISTMAS CARDS promote goodwill. Ask The Caravel Press to help you with yours. They design and print specials, or overprint from a large and original stock. 11 Moxon Street, London W1. HUNTER 0492.

WEATHER OAK PRESS LIMITED – British Federation of Master Printers Annual Print Collection: Fifty specimens of the finest quality printing are chosen each year by the British Federation of Master Printers from entries submitted from all over the country. These fifty represent the cream of printing during one year. The results of the judging for 1957 just announced show that three of the fifty chosen were produced by this Company, and we feel justifiably proud of this remarkable achievement. From the creation of designs we carry to the printed stage the imaginations of our artists, first expressed on bits of tracing paper. In our works we produce art of unusual refinement and print of exceptional quality. Literature and specimens of work on request to Head Office and Works: Summer Road, Edgbaston, Birmingham 15. Telephones: CALthorpe 1983 & 2844.

'BETTER MOUSE TRAPS need a pathway of well-planned advertising.' Van-Raymond Advertising Ltd, Wheatsheaf House, 4 Carmelite Street, EC4. FLEet Street 3452

ESIGN is published for the Council of Industrial Design, The Design Centre, 28 Haymarket, London SW1 (Scottish Committee: at 46 West George Street, Glasgow C2) by
er Majesty's Stationery Office K116 SO Code No. 88-1266-58-10* Printed in Great Britain by *Balding & Mansell*, London and Wisbech

CLASSIFIED

advertisements

continued from page 79

PROTOTYPES & MODEL MAKING

RICHARD DENDY & ASSOCIATES welcome your enquiries for architectural, engineering, experimental and ship models; production runs of advertising units in rubber, plastics, wood or metal; prototypes in all materials; giant exhibition and carnival displays. 4, 5 and 6 Seaton Place, Hampstead Road, London NW1. EUSTON 7617 and 1981.

WESTWAY MODELS LIMITED – the largest model-making organisation in the United Kingdom specialising in models for display, exhibition, product design and prototype-development. 15–17 Brunel Road, East Acton, London W3. Telephone SHEPHERDS BUSH 7022.

METAL – WIRE – TUBULAR WORK. Let us manufacture your prototypes and/or production runs. Holborn Metal Works, 334 Upper Street, N1. CAN 8042.

MISCELLANEOUS

FRAMES OF ALL types made. A comprehensive stock for immediate use. Rowley, 87 Campden Street, Kensington. Telephone PARK 4349.

WOOD CARVERS and Sculptors: dry Lime available from ¾" to 12" thick. Albert Turner & Son Ltd, 35 High Street, Lewes; telephone LEWES 520.

PHOTOGRAPHY

DENNIS HOOKER offers to Designers and Manufacturers a complete service of creative colour and black and white photography. Gordon McLeish and Associates, 44 Queen's Gate Terrace, SW7. KNIGHTSBRIDGE 7878.

Type repro. problems? PHOTO TYPESETTING could supply the answer: Display and special lettering, set direct to film or bromide, has many advantages – investigation and trial of its many applications is well worth while. PHOTO SET LTD, 9 Emerson Street, London SE1. Telephone: WATERLOO 6630.

ADVERTISERS *in this issue*